

POOR LEGIBILITY

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DUE TO THE QUALITY OF THE ORIGINAL**

Comstock Mill Historical Survey Site Packet

Mill # 17 Mill Name: Woodworth Mill

AKA "NEW OPTIC"
OR "WORTH" ~~WORTH~~
CARSON VALLEY
MILL
OR CARSON RIVER
MILL

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Appendices

Appendix A – 17 Woodworth Info Report

Appendix B – 17 Woodworth Mill IMACS

1.0 HISTORICAL DOCUMENTATION OF MILL

1.1 HISTORICAL SUMMARY OF WOODWORTH MILL

The Woodworth Mill was located on the Carson River one mile south of Dayton (Ansari 1989:82) at a location where three additional mills were erected at various times. These mills were known as the Woodworth Mill, the Woodworth & Hastings Mill, the Hastings & Co. Mill, the Mosheimer Mill, the Ophir Mill, and the New Ophir Mill (Science Applications International Agency, Technology Services Company [SAIA TSC] 1994:5). The Woodworth mill was also known as the Carson River Quartz Mill, and appears under that name on Bancroft's 1862 map (Figure 1). The Hastings & Woodworth Mill, the earliest mill on the site, was reportedly the first water-powered mill on the Comstock, beginning operations in 1859. This mill contained two arrastras and was located at the site of the later Carson River Quartz Mill (Ansari 1989:81; Kelly 1862:214; Bancroft 1981:111; Rickard 1932:98).

The Carson River Quartz Mill was listed in 1862 as being owned by Joseph Woodworth, William Stewart, and John B. Winters. The site was then known as Camp Woodworth. The mill contained ten stamps, four arrastras, and two turbine wheels powered by water brought in by a 23-foot wide by 2000-foot long. The mill used Hungarian bowls and the Hayden process and processed twenty tons of ore each day from the owners' claim at the Henderson in Gold Hill. The mill employed ten men with J. B. Winters as superintendent. The mill had several outbuildings and Mr. Mosheimer had a ten stamp mill adjoining the site.

The Carson River Quartz Mill was purchased by the Ophir Company in 1863, which erected a larger mill at the site (Historical American Engineering Record [HAER] 1980). The mill was located seven and one half miles from its mine and employed 13 men (Browne 1867: 352-353). The New Ophir Mill was reported, in 1865, to have 24 stamps powered by steam (*Gold Hill Daily News* 1865:3) and was recorded on an 1866 General Land Office survey map (Figure 2) and was also on the site in 1867. It was owned by the Ophir S. M. Co. and was built in 1864 at a cost of \$75,000. This mill was water-powered and steam (?) with 24 650-pound stamps and a 10-foot-diameter turbine wheel; it contained 12 Hepburn pans, six settlers, and one agitator. It processed 40 tons each day and 1,200 tons per month.

By the 1870s, the Woodworth Mill was listed with 24 stamps, 12 pans, and a 48 ton capacity (Ansari 1989:82; Nevada State Mineralogist 1873:100; Powell 1976:67). In 1871, the mill was overhauled (*Territorial Enterprise* 1871:3). In 1873, the mill was reported to be working slimes and tailings, and contained 12 pans (*Territorial Enterprise* 1873a:3; 1873b:3). In 1874, the Woodworth Mill worked 1,279 tons with a yield of \$91,192.65 (Raymond 1874:182). The Woodworth Mill was recorded on Wheeler's 1877 map (Figure 3). The mill was the scene of an accident in 1884, when a revolving shaft crushed an employee's arm (?) after his sleeve became caught in the gears (*Reno*

Evening Gazette 1884:2). That same year, the mill received 1,000 cords of wood from the Nevada Wood and Flume Company (*Weekly Reno Gazette* 1884:2).

The mill may also have been the site of the marriage of Senator W. J. Westerfield to Mary R. Sims of Dayton, as their wedding was reported "at the Woodward Mill residence" (*Nevada State Journal* 1888:2). In 1889, the Woodward Mill still worked tailings (De Quille 1889:81).

A Historic American Engineering Record report was performed in June 1980 at this site (HAER 1980). The map from this report is shown in Figure 4.

The following tables contain the full title history of the Woodward Mill (SAIA TSC 1993:16-22).

| DATE | TYPE | FROM | TO | DESCRIPTION | FILED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|-------------------|---|--|---|-------------------------------|-------------|-------------|-----------------------------------|
| 07-23-1860 | Deed | Joseph W. Hastings | John B. Winters | 300 acres and mill 1/10 operated by Woodward, Stewart, Hastings and others | 10-04-1860 | CCR Deeds C | 215-216 | Also LC/CCR Deeds A/183-185 (C-1) |
| 07-23-1860 | Mtg. | John B. Winters | Joseph W. Hastings | against 1/10 of 300+ acres | 10-01-1860 | CCR Deeds D | 621-622 | (C-2) |
| 07-23-1860 | Deed | Joseph Woodward | Joseph W. Hastings | 22 1/2 / 100 of 320 acres and quartz mill operated by Hastings, Stewart and Woodward | 03-16-1861 | CCR Deeds A | 147 | Also LC/CCR Deeds A/155-157 (C-3) |
| 08-08-1860 | Mtg. | Joseph Mosheim Guido Kustel | Mrs. Mary Klein | against Woodward & Hastings Quartz mill (10-stamp) and land (#30 Hungarian amalgamators) | 10-01-1860 | CCR Deeds B | 623-624 | (C-4) |
| 08-09-1860 | Art. of Agreement | Quartz Mill of the Carson River Mining Company aka J. W. Hastings & Co. | Guido Kustel Joseph Mosheim aka Mosheim & Kustel | 3 year lease for ground & water to erect and run a 10-stamp mill | 10-02-1860 Carson City Co. | CCR Deeds B | 625-627 | (C-5) |
| 09-03-1860 | Agreement | Mosheim & Kustel | Joseph Sorber | Sorber paid \$4,000 to enlarge Mosheim & Kustel mill aka Woodward & Hastings mill. Conveys 1/4 of 10 stamp mill to Sorber | 04-24-1861 | CCR Powers | 104 | (C-6) |
| 09-21-1860 | Deed | Joseph Woodward | William Stewart | 17 1/2 / 100 ac in A/111-115 | 10-02-1860 | CCR Deeds B | 637-638 | Also LC/CCR Deeds A/113-115 (C-7) |

| | | | | | | | | |
|-----------------------|----------------------------|---|---|---|------------|-------------------|-------------|--|
| 09-21-1860 | Deed | Joseph Woodworth | William Stewart Joseph W. Hastings John B. Winters | 30/100 ac in A/113-115 | 10-02-1860 | CCR Deeds A | 438- 429 | Also LC/CCR Deeds A/113-115 (C-8) |
| 09-21-1860 | Deed | James Walsh | Joseph Woodworth | 1/2 of 37 1/2 / 100 Mill and Property of Woodworth and Company (320 acres) | 10-01-1860 | CCR Deeds B | 435- 434 | Also LC/CCR Deeds A/113-115 (C-9) |
| 09-24-1860 | Mtg. | William Stuart Joseph W. Hastings John B. Winters | Joseph Woodworth | Against mill and property of Woodworth & Co. (320 acres) | 10-03-1860 | CCR Deeds B | 205- 204 | (C-10) |
| 09-24-1860 | Mtg. | John B. Winters | Joseph W. Hastings | against shares of mill site (320 acres) and mill of Woodworth & Co. | 10-24-1860 | CCR Deeds B | 203- 204 | (C-11) |
| 09-29-1860 | Deed | William Stuart | John B. Winters | 1-3/4 / 100 Mill of the Woodworth and Company and 320 acres | 01-19-1861 | CCR Deeds C | 535- 536 | Also LC/CCR Deeds A/209-211 (C-17) |
| 10-29 & 10-30-1860 | Survey of Land Claim | County Surveyor | Joseph W. Hastings John B. Winters William Stuart | 525.79 acres including mill house and stable | 11-26-1860 | CCR Deeds D | 001 | (C-12) |
| 12-03-1860 | Mtg. | John R. Harold John Drynan | Joseph W. Hastings | against 42 1/2 / 100 of Quartz Mill and mill site of Woodworth, Walsh & Co. | 12-15-1860 | CCR Deeds C | 470- 471 | (C-13) |
| 12-03-1860 | Deed | J. W. Hastings | John R. Harold John Drynan | 42 1/2 / 100 location made by Woodworth, Walsh and Company also quartz mill now erected Deed Incumbent on mortgage | 12-15-1860 | CCR Deeds C | 471- 472 | Also LC/CCR Deeds A/191-192 (C-14) |

| | | | | | | | | |
|------------|-------------------|---|--|--|------------|--------------------|-------------|--|
| 12-03-1860 | Deed | J. W. Hastings | John R. Harold John Drynan | 41 1/2 / 100 of location made by Woodworth, Walsh & Company and Quartz Mill now erected (encumbered by mortgage) | 01-19-1861 | CCR Mortg. A | 372- 373 | Also LC/CCR Deeds A/349-373 (C-15) |
| 12-04-1860 | Deed | Guido Kustel Joseph Hoshwimer | John B. Winters | 1/2 "Hoshwimer Mill" consisting of 10 stamp Quartz Crushing Mill and Assigment and rights granted in B/626 | 12-12-1860 | CCR Mortg. A | 095 | Also LC/CCR Deeds A/293-295 (C-16) |
| 01-01-1861 | Deed of Trust | John R. Harold | John Drynan | 1/2 of 42 1/2 / 100 of mill and mill site formerly owned by Woodworth, Walsh & Co. | 01-05-1861 | CCR Deeds C | 502- 504 | (C-18) |
| 01-01-1861 | Mtg. | John R. Harold | John Drynan | 1/2 of 42 1/2 / 100 of mill and mill site formerly owned by Woodworth, Walsh & Co. | 03-19-1861 | CCR Mtg. A | 057- 058 | (C-19) |
| 05-01-1861 | Mtg. | Joseph Woodworth | John Drynan | 42 1/2 / 100 of mill site location made by Woodworth, Walsh & Co. | 05-20-1861 | CCR Deeds C | 728- 727 | (C-20) |
| 05-01-1861 | Mtg. | Joseph Woodworth | John Drynan | 42 1/2 / 100 of mill site location made by Woodworth, Walsh & Co. | 05-20-1861 | CCR Mtg. A | 100 | (C-21) |
| 05-20-1861 | Satisf- action | John Drynan | | notation in margin regarding satisfaction of D/T at CCR Mtg. A/57 | | CCR Mtg. A | 057 | (C-19) |
| 03-01-1862 | Deed | John B. Winters | William Stewart | 28-3/4 / 100 Woodworth & Walsh location | 03-04-1862 | Deeds A | 001- 002 | (C-22) |
| 01-12-1862 | Deed | John B. Winters William Stuart Joseph Woodworth | Ophic Silver Mining Company (CA Corp.) | 525.79 acres and Quartz Mill | 02-04-1862 | Deeds A | 483- 485 | (C-23) |

| | | | | | | | | |
|------------|------|--|------------------------------------|---|------------|------------|---------|--------|
| 09-12-1870 | Deed | L. P. Drexler | W. S. Hobart | 1/2 Woodworth Mill + 525 acres | 09-12-1870 | Deeds D | 049-071 | (C-33) |
| 09-11-1870 | Deed | W. S. Hobart | John W. Mackay J.G. Fair | 1/2 Tailings carried by flume 1/2 Woodworth Mill and 525 acres (intended as mortgage according to G/484) | 09-11-1870 | Deeds G | 071-072 | (C-34) |
| 01-06-1872 | Deed | John W. Mackay James G. Fair | W. S. Hobart | 1/2 525 acres and Woodworth mill | 02-07-1872 | Deeds D | 484-486 | (C-35) |
| 12-15-1875 | Deed | W. S. Hobart | Nevada Bank of San Francisco | 1/2 Woodworth Mill + 525 acres (recorded at request of Wells Fargo and Company) | 12-20-1875 | Deeds H | 284-285 | (C-36) |
| 12-21-1875 | Deed | James G. Fair | Pacific Mill and Mining Company | 1/2 SW 1/4 of NW 1/4 Section 26 (Parcel B) (Recorded at request of Wells Fargo Co.) | 12-28-1875 | Deeds H | 287 | (C-37) |
| 12-21-1875 | Deed | James G. Fair | Nevada Bank of San Francisco | 1/2 SW 1/4 of NW 1/4 Section 26 (Parcel B) (Recorded at request of Wells Fargo & Co.) | 12-28-1875 | Deeds H | 288 | (C-38) |
| 01-02-1904 | Deed | Pacific Mill and Mining Company Hobart Estate Company | W. J. Westerfield | Parcel known as Woodworth Mill property SW 1/4 of NW 1/4 Section 26 (Reference to Hastings and Company's quartz mill) | 04-18-1904 | Deeds H | 660-662 | (C-39) |
| 01-18-1904 | Deed | Louise Mackay Clarence H. Mackay | W. J. Westerfield | Parcel A in F/465 Parcel B | 04-18-1904 | Deeds H | 663-665 | (C-40) |
| 01-21-1904 | Deed | Theresa A. Delrich Virginia Vanderbilt James L. Flood | W. J. Westerfield | Parcel A in F/465 Parcel B | 04-18-1904 | Deeds H | 665-667 | (C-41) |

| | | | | | | | | |
|------------|-----------------|---|--|---|------------|-------------|---------|------------------------------|
| 04-18-1904 | Deed | W. J. Westerfield | Henry Cosbellick | Parcel A Parcel B | 04-18-1904 | Deeds H | 667-668 | (C-42) |
| 07-05-1905 | Deed | Ophir Silver Mining Company (CA Corp.) | Henry Cosbellick John Depoali | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 | 07-11-1905 | Deeds D | 033 | (C-43) |
| 03-11-1914 | CBS Deed | Henry Cosbellick | John Depoali | 1/2 of SE 1/4 Section 27 1/2 of W 1/2 of SW 1/4 Section 26 | 03-24-1914 | Deeds S | 178 | (C-44) |
| 01-30-1915 | Sales Agmt. | John Depoali | Marcilio Sorani Constantino Benedetti | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 (Parcels A & B) | 02-04-1915 | Misc J | 052-053 | Document #12314 (C-45) |
| 03-21-1918 | Assign- ment | Constantino Benedetti | Alfred Chartz | Assigns 1/2 of J/32 | 03-21-1918 | Misc J | 890-893 | (C-46) |
| 03-21-1918 | Assign- ment | Constantino Benedetti | Alfred Chartz | Assigns 1/2 of Parcel A | 03-21-1918 | Misc J | 882+ | (C-47) |
| 01-21-1918 | Agree- ment | Alfred Chartz | Marcilio Sorani Cosima Sorani | Assigns interest received by J/490 | 02-14-1918 | Misc J | 890-890 | (C-48) |
| 03-10-1919 | Deed | Estate of John Depoali | Marcilio Sorani | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 (Parcels A & B) | 03-13-1919 | Deeds U | 487-489 | (C-49) |
| 10-19-1943 | Deed | Easa Chartz | Helen Haley Beatrice E. Chartz John M. Chartz | NE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 | 01-10-1944 | Deeds 12 | 517-540 | Document #51015 (C-50) |
| 01-08-1948 | Deed | Helen Haley Beatrice E. Chartz John M. Chartz | Pio Quilici | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 Portion of NE 1/4 of SW 1/4 Section 26 | 01-21-1948 | Deeds 35 | 213-218 | Document #55506 (C-51) |
| 07-26-1950 | Deed | Pio Quilici | Mary Louise Quilici | See Deeds 18/218 168.81 acres | 09-21-1950 | Deeds 36 | 242-283 | Document #58284 (C-52) |

| Date | Document Type | Grantor | Grantee | Description | Date | Document Type | Page | Notes |
|------------|-----------------|---|--|---|------------|---------------|-------------|------------------------------|
| 04-16-1904 | Deed | W. J. Waterfield | Henry Combellick | Parcel A Parcel B | 04-16-1904 | Deeds | 647- 668 | (C-42) |
| 07-05-1905 | Deed | Ophir Silver Mining Company (CA Corp.) | Henry Combellick John Depaoli | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 | 07-11-1905 | Deeds | 021 | (C-43) |
| 03-13-1914 | CAS Deed | Henry Combellick | John Depaoli | 1/2 of SE 1/4 Section 27 1/2 of W 1/2 of SW 1/4 Section 26 | 03-24-1914 | Deeds | 378 | (C-44) |
| 01-10-1915 | Sale Agt. | John Depaoli | Marsilio Sorani Constantino Benedetti | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 (Parcels A & B) | 01-04-1915 | Misc | 052- 055 | Document #22334 (C-45) |
| 03-21-1918 | Assign- ment | Constantino Benedetti | Alfred Chartz | Assigns 1/2 of J/432 | 01-23-1918 | Misc | 490- 493 | (C-46) |
| 03-21-1918 | Assign- ment | Constantino Benedetti | Alfred Chartz | Assigns 1/2 of Parcel A | 03-23-1918 | Misc | 462- | (C-47) |
| 03-21-1918 | Agree- ment | Alfred Chartz | Marsilio Sorani Casira Sorani | Assigns Interest received by J/432 | 02-15-1919 | Misc | 593- 600 | (C-48) |
| 03-10-1919 | Deed | Estate of John Depaoli | Marsilio Sorani | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 (Parcels A & B) | 03-13-1919 | Deeds | 407- 409 | (C-49) |
| 10-19-1947 | Deed | Emma Chartz | Helen Haley Beatrice L. Chartz John M. Chartz | NE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 | 01-10-1944 | Deeds | 527- 540 | Document #51035 (C-50) |
| 01-04-1948 | Hom | Helen Haley Beatrice L. Chartz John M. Chartz | Pio Quilici | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 Portion of NE 1/4 of SW 1/4 Section 26 | 01-24-1948 | Deeds | 215- 218 | Document #55506 (C-51) |
| 07-16-1950 | Deed | Pio Quilici | Mary Louise Darling | See Deeds 18/218 148.83 acres | 08-23-1950 | Deeds | 287- 289 | Document #58284 (C-52) |

| Date | Document Type | Grantor | Grantee | Description | Date | Document Type | Page | Notes |
|------------|----------------|--------------------------------------|--------------------------|---|------------|---------------|-------------|------------------------------|
| 09-01-1953 | Quiet Title | | | No useful information on file - regards 3 acre portion not next to mill | | | | Case #3422 |
| 09-08-1953 | Corr Deed | Pio Quilici | Mary Louise Darling | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 Portion of NE 1/4 of SW 1/4 Section 26 | 09-11-1953 | Deeds | 218- 220 | Document #4413 (C-53) |
| 02-14-1955 | Deed | Mary Louise Darling Blake Darling | FX-6 Personal Privacy | 2003-2004, now known as FX-6 Personal Privacy | 07-03-1956 | Deeds | 278- 280 | Document #70984 (C-54) |
| 10-10-1975 | Agt. | FX-6 Personal Privacy | FX-6 Personal Privacy | All property | | | | Not searched |
| 11-04-1983 | Deed | FX-6 Personal Privacy | FX-6 Personal Privacy | FX-6 Personal Privacy | 02-23-1984 | None | None | Document #83849 (C-55) |

a patent." 5B Thompson, Thompson on Real Property Sec. 2724 (1978 Replacement Volume)

The pre-emption rights do not preclude the pre-emptor from selling or otherwise disposing of the land after entry has been made. Since mortgages are not grants or conveyances, the right of a pre-emptor to mortgage his interest has been upheld.

In this light, the prepatent transfer of property by sale, lease, or mortgage appears to be a valid conveyance of an imperfect title. Thus prepatent owners should be considered "prior owners" under 42 U.S.C. 9607 (a)(2).

The title search for the Dayton millsites was performed from January through April 1992. At the time the title search was conducted, the exact location of some millsites was unknown. Subsequent ground searches of the area based on title documents and other sources, have determined the locations of the millsites. The parameters used in the title search may not fully encompass the area which was later determined to constitute the millsite. Further, the title narrative may not reflect the current assessed owners of some parcels, indicating that conveyances have occurred since the title search was conducted.

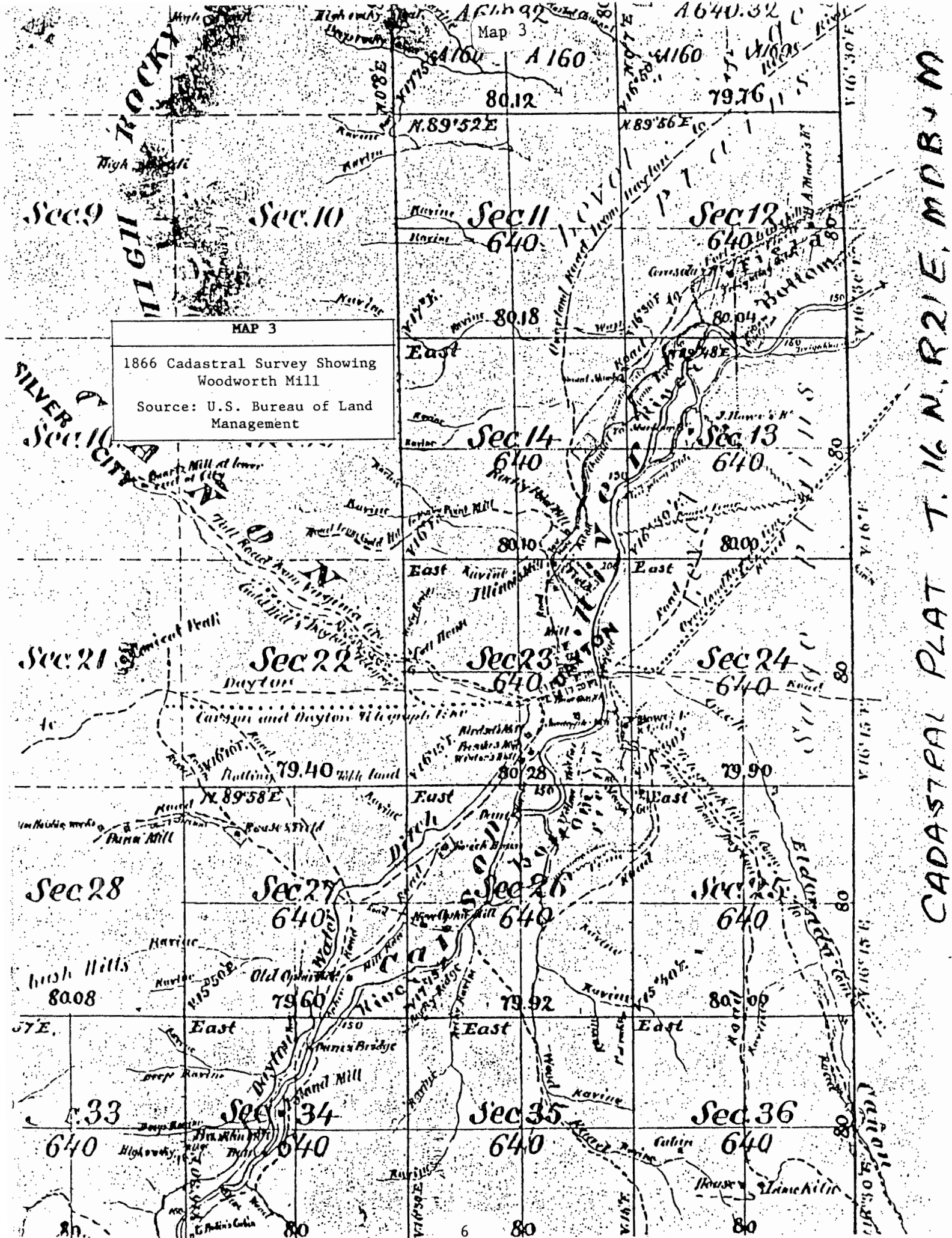
2.1 Woodworth Mill

The Woodworth Millsite may have contained as many as three separate mills. As discussed below, these mills were known at various times by different names, including the Woodworth Mill, the Woodworth & Hastings Mill, the Hastings & Co. Mill, the Mosheimer Mill, the Ophir Mill and the New Ophir Mill. As noted below, there are some inconsistencies and gaps in the early history of the Woodworth site.

According to the July 1865 survey made of the township by the United States Government, the mill bears N. 8 1/2° E. from the common corner of Sections 26, 27, 34 and 35, and bears S. 29° E. from the quarter corner between Sections 26 and 27, T. 16 N., R. 21 E., Mount Diablo Base Meridian (MDBM). Two structures are indicated at this site on the 1866 Cadastral Plat and the Record of Survey at Book B of Surveys, Pages 170-172 (Maps 3 and 4).

One of the first mills in the territory, the Woodworth Mill was erected by Joseph Woodworth and James Walsh in the fall of 1859 (A-1;013109). Woodworth and Walsh were either already partners with Joseph W. Hastings (Hastings), William Stewart (Stewart), and John B. Winters (Winters), or brought them in as partners soon thereafter. The exact origins of these parties' interests are unclear due to incomplete documentation and the complex nature of those transactions that are documented.

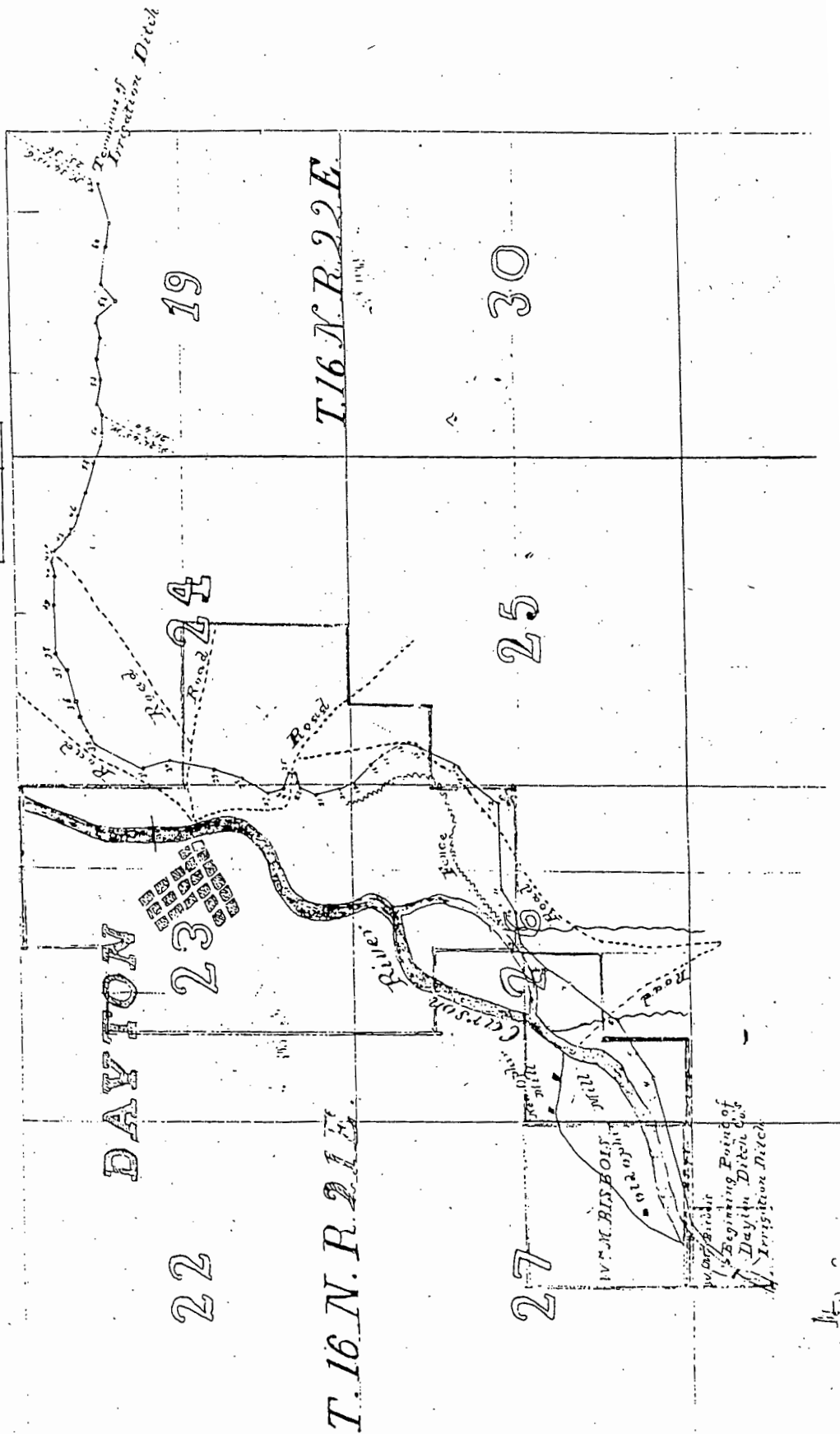
On July 23, 1860, Woodworth deeded to Hastings a 32.5% interest in 300 acres of land and a mill on that land operated by Woodworth, Stewart and Hastings (C-3). On that same day, Hastings granted Winters a 10% interest in the same property and mill (C-1), receiving a mortgage from Winters on that interest (C-2). In August of 1860, a lease was granted by the "Quartz Mill of the Carson River



Book B
Page 170

Map 4

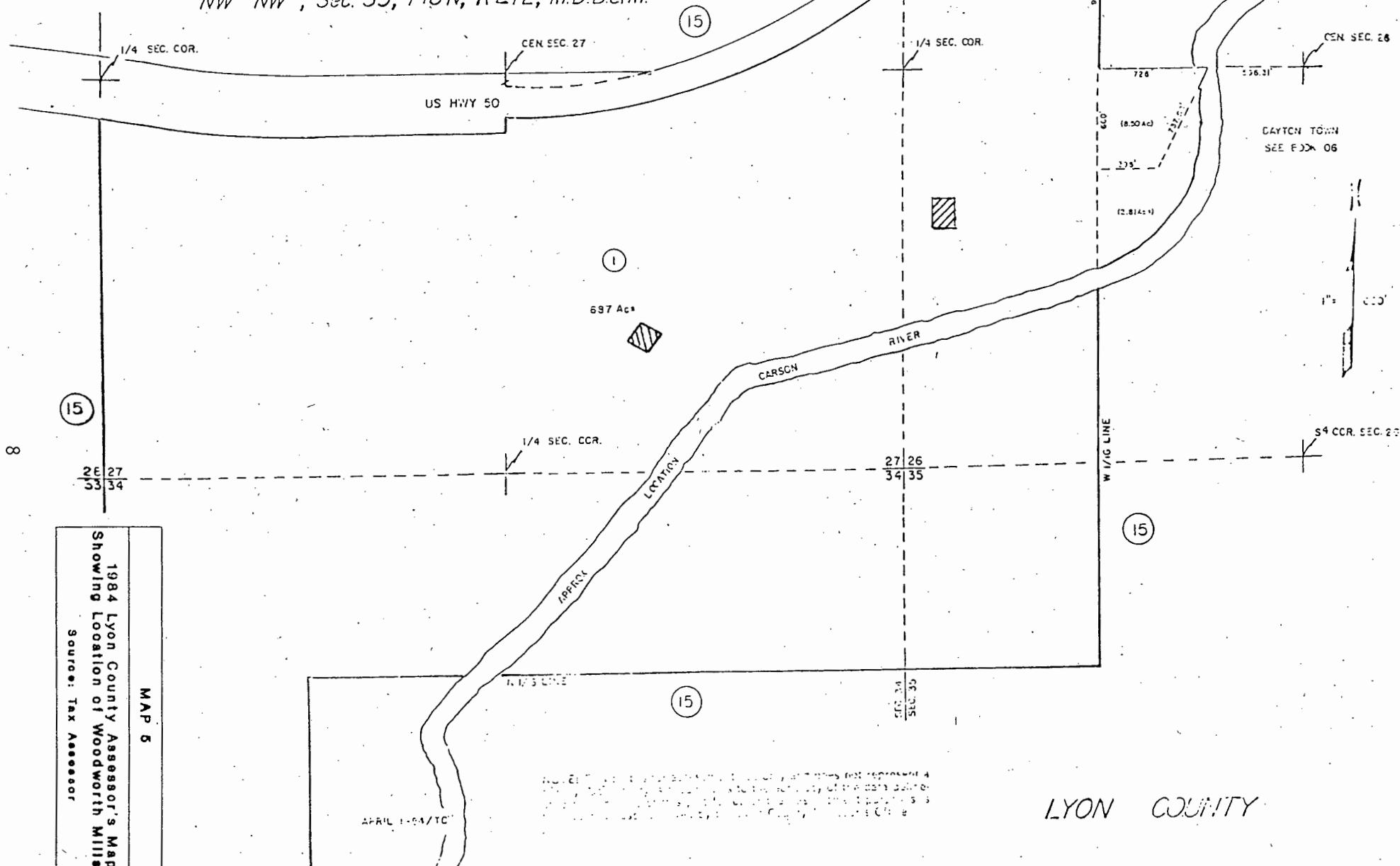
| |
|-------------------------------------|
| MAP 4 |
| Record of Survey of Woodworth, Mill |
| Source: Lyon County Recorder |



NW⁴ NW⁴, Sec. 35; T16N, R21E, M.D.B.&M.

16 - 26

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Pg 11



LYON COUNTY

1984 Lyon County Assessor's Map
Showing Location of Woodworth Millsite

MAP 5

Source: Tax Assessor

Mining Company" operating under the name of "J.W. Hastings & Company" to Joseph Mosheimer and Guido Kustel operating under the name of Mosheimer & Kustel for a term of three years to erect and run a quartz mill (C-5). On August 8, 1860, Mosheimer & Kustel gave a mortgage on the leased property to Mrs. Mary Klein (C-4).

One month later, on September 8, 1860, Mosheimer & Kustel entered into an agreement with Joseph Sorber under which Sorber was to pay \$4000 and enlarge "the quartz mill of Mosheimer & Kustel situated in Carson River, Nevada Territory known as Woodworth & Hastings Mill" in exchange for Sorber's receiving a 25% interest in the mill (C-6). From these documents, it is not entirely clear whether the Mosheimer & Kustel mill was actually built.

On December 4, 1860, a one-half interest in the "Mosheimer Mill," rights to which were acquired in the September 8, 1860 lease agreement, was conveyed to Winters by Mosheimer & Kustel (C-16). The miscellaneous volume covering this period has not been located, so the further history of the lease is unavailable. While the interest conveyed by C-16 suggests that the mill existed, it is questionable, given practical considerations of time and technology, whether a new mill could have been constructed this quickly. Moreover, it appears odd that Mosheimer and Kustel, as lessees, were trying to transfer an apparent fee interest.

On September 21, 1860, Woodworth conveyed a 17.5% interest in the mill and property of "Woodworth & Company," consisting of 320 acres, to Stewart (C-7). That same day, Woodworth granted Stewart, Hastings and Winters a 30% interest in the same property (C-8). Meanwhile, and also on September 21, James Walsh granted Woodworth one-half of a 37.5% interest in the same property (C-9). On September 24, 1860, Stewart, Hastings and Winters executed a mortgage in favor of Woodworth on the property (C-10), while Winters individually executed a mortgage to Hastings for shares in the property (C-11). Several days later, on September 29, 1860, a deed from "William Stuart" [sic] conveyed an additional 8.75% interest in the property to Winters (C-17). Stewart, Hastings and Winters were granted a petition seeking water rights in connection with the operation of the "Hastings Quartz-Mill" on October 24, 1860 (A-1;013109). Their petition, granted by the county probate judge and selectmen, claimed that they were the owners of the "water rights acquired by Woodworth and Walsh, who located the said place on or about the 9th of July 1859, and who soon after constructed a Quartz Mill." This suggests that the Hastings and Woodworth mills may have been one and the same.

On November 8, 1860, a "Certificate of Survey to Hastings, Winters & Stewart" was issued by the County Surveyor (C-12). It contains a detailed metes and bounds description, consisting of 525.79 acres, and shows only one mill on the property.

On December 3, 1860, there appear to have been two deeds executed by Hastings to John R. Harold and John Drynan (C-14, C-15). Each of these deeds purport to convey a 42.5% interest in the property "formerly owned by Woodworth, Walsh & Co." as well as the mill "now erected and in operation upon the premises aforesaid". It is possible that one of these transfers may be redundant or repetitive because while the exact nature of the various parties' interests at that point in time is not entirely clear, it does not appear that Hastings had an 85% interest. In addition, on that same date, December 3, Harold and Drynan

executed a mortgage in favor of Hastings for a 42.5% interest in the property (C-13). The existence of only one mortgage also suggests that there was only one transfer of a 42.5% interest.

There are, however, several other inconsistencies surrounding these transactions. First, while both deeds were executed on the same day, C-14 was recorded on December 15, 1860, while C-15 was not recorded until March 19, 1861. Second, on January 1, 1861, Harold executed a deed of trust (C-18) and a mortgage (C-19) to Drynan, each for one-half of a 42.5% interest in the former Woodworth & Walsh Co. mill and property. The deed of trust (C-18) was recorded on January 5, 1861 in Carson County Records (CCR) Deeds Book C, pages 502-504. The mortgage (C-19) was recorded in CCR Mortgages Book A, pages 57-58 on March 19, 1861. These facts raise the possibility that the parties were trying to protect themselves by recording the transactions in all possible places (in both the deed and mortgage books).

It does not appear possible to clarify these transactions by attempting to analyze what interests were later transferred by Harold and Drynan to other parties. There are no records of any later deeds from Harold or Drynan beyond those discussed above. There is a notation on the mortgage executed by Harold in favor of Drynan indicating that it was satisfied on May 20, 1861.

Further complicating matters is the fact that there are two mortgages by John Drynan in favor of Joseph Woodworth dated May 1, 1861, and recorded on May 20, 1861 (C-20, C-21). Both of these mortgages are for a 42.5% interest in the property. One was recorded in CCR Book A of Mortgages while the other was recorded in CCR Book C of Deeds. It would appear by the deed of trust and mortgage from Harold to Drynan that Harold intended to transfer his full interest to Drynan, thus enabling Drynan to mortgage the full interest. However, the nature of the transaction between Drynan and Woodworth is unclear, because while the above mortgages are recorded, there is no indication of any deed or deeds transferring from Drynan to Woodworth.

It is possible that the record of the deed or deeds from Drynan to Woodworth is missing, because, following a March 1, 1862 conveyance by Winters to Stewart of a 28.75% interest in the property (C-22), it appears that Winters, Stewart and Woodworth had a 100% interest in the property. In Kelley's 1862 Directory, this mill was identified as the Carson River Quartz Mill and the proprietors were reported to be Joseph Woodworth, William Stewart, and John B. Winters. The Mill contained 10 stamps and 4 large arrastras and was powered by water brought through a ditch 23 feet wide and 2000 feet long. It had the capacity to crush 20 tons of ore a day. (A-2;A011026)

Woodworth, Stewart and Winters transferred what appears to be a 100% interest including the entire 525.79 acres and mill to the Ophir Silver Mining Company (a California corporation) on January 13, 1863 (C-23). Historical accounts suggest that the Ophir Silver Mining Company rebuilt the mill the following year (A-3;A008136). However, at least one contemporary map shows that by 1867, there were two mills on the property, the "Woodworth Mill" and the "Ophir Mill". In the 1865 Annual Report of the Surveyor General, the new Ophir Mill was described as being erected in 1864, being powered by steam and water, and having 24 stamps

and 15 pans with a crushing capacity of 35 tons per day. The mill worked ore from the Yellow Jacket and Ophir mines (A-4;A008364) (B-4;A008572).

There is a possible gap or lack of clarity in the title for the property at this point. The next documented transactions are the grants of patents from the U.S. Government to William Brisbois on October 10, 1866. These grants include the southwest quarter of the southwest quarter of Section 26, amounting to 40 acres (C-24), the southeast quarter of Section 27, amounting to 160 acres (C-25), and the north half of the southwest quarter of Section 26, amounting to 80 acres (C-26). These grants total 280 acres. There is also a gap in the title history of the remainder of the property, which picks up with the transfer on June 1, 1867 of the southeast quarter of the northeast quarter of Section 27 and the southwest quarter of the northwest quarter of Section 26 from Lucy Frazier to the Ophir Silver Mining Company (C-27). The title documents do not explain who Frazier or Brisbois were or what their interest in the property was.

On October 23, 1869, Ophir Silver executed a deed conveying the property "formerly known as the property of the 'Carson River Mining Company' since and now known as the Woodworth, or Ophir, Mill property consisting of a Quartz Mill . . . and . . . 525.79 acres of land" to W. S. Hobart (C-29). This parcel will be referred to as "Parcel A."

Hobart deeded a one-half interest in 529 (not 525.79; apparently a transcription error) acres formerly owned by the Ophir Silver Mining Co., including a quartz mill formerly known as the Woodworth Mill, along with a one-half interest in a flume constructed by Hobart from Silver City to the quartz mill "for the purpose of carrying tailings to said Mill," to James C. Flood, W. D. O'Brien, doing business as Flood & O'Brien, J. W. Mackay and J. G. Fair on June 14, 1870 (C-30). This deed did not specifically transfer an interest in the tailings themselves, nor is there a map which shows the location of the flume. The deed broke out the interest as follows: Flood & O'Brien; three-sixteenths, Mackay; three sixteenths, and Fair; one-eighth.

Meanwhile, on July 1, 1870, Hobart mortgaged his remaining one-half interest in 525 (not 529) acres, the mill, the flume and "also 1/2 of the tailings carried and deposited at said mill by said flume" to L. P. Drexler (C-31). This document reads like a deed rather than a mortgage, but the "defeasance" that immediately follows in the record (C-32), clarifies the first document's role as a mortgage in light of other monies then being owed by Hobart to Drexler. On September 12, 1870, Drexler reconveyed his interest back to Hobart in an apparent satisfaction of the mortgage (C-33).

On the next day, September 13, 1870, Hobart conveyed a one-half interest in the property, including the mill, flume and tailings, to John W. Mackay and James G. Fair (C-34). This document reads like, and is recorded as, a deed. However, an indenture executed January 6, 1872 by Mackay and Fair (C-35) indicates that the parties intended C-34 to be a mortgage for repayment of \$35,000, and that C-35 was intended as a reconveyance to Hobart due to his satisfaction of that mortgage.

Throughout this period, contemporary accounts indicate that the mill continued to operate. In the 1869-1870 State Mineralogist Report for Lyon County, the

Woodworth Mill was reported to have 24 stamps and 12 pans (A-5;A008529). In the 1871-1872 State Mineralogist Report, and the 1876 Land of Silver, the Woodworth Mill was reported to have 24 stamps and a crushing capacity of 48 tons of ore per day (A-6;A011002) (A-7;A005026).

Hobart could not seem to hang on to his remaining one-half interest, and on December 15, 1875, he conveyed it (again described as 529 acres) to the Nevada Bank of San Francisco (C-36). This conveyance did not specifically include the flume or tailings. It was recorded at the request of Wells Fargo & Co.

Later that month, on December 22, 1875, James Fair conveyed a one-half interest in the southwest quarter of the northwest quarter of Section 26 (Parcel B) to the Nevada Bank of San Francisco (C-38), and in a separate transaction, the same interest to the Pacific Mill & Mining Co. (C-37). These transactions were recorded at the request of Wells Fargo & Co.

On January 2, 1904, Pacific Mill and Mining and the Hobart Estate Co. conveyed to W. J. Westerfield their interests (C-39) in property described in a metes and bounds description and recorded as "being the same property mentioned in a deed from the 'Ophir Silver Mining Company' to W. S. Hobart dated October 23rd, 1869," (Parcel A) along with another parcel described as the southwest quarter of the northwest quarter of Section 26, this being the same property as described in a deed from J. G. Fair to Pacific Mill and Mining, dated December 22, 1875 (Parcel B). Fair had already conveyed a 1/2 interest in that parcel, parcel B, to the Nevada Bank of San Francisco on that same date (C-38), in addition to the interest transferred to Pacific Mill and Mining Company. There is no indication of the Nevada Bank of San Francisco conveying out its interest.

Later that month, on January 18, 1904, Louise Mackay and Clarence Mackay conveyed their interest in the property (apparently Mackay's 3/16) to Westerfield (C-40). Likewise, on January 21, 1904, Theresa Oelrich, Virginia Vanderbilt and James L. Flood (who was the President of Pacific Mill and Mining Co.) (C-39) conveyed their interest (apparently Flood & O'Brien's 3/16) to Westerfield (C-41). Westerfield conveyed Parcels A and B to Henry Combellick on April 16, 1904 (C-42).

On July 5, 1905, Ophir Silver deeded the southeast quarter of Section 27, and the west half of the southwest quarter of Section 26 to Henry Combellick and John Depaoli (C-43). On February 20, 1907, Combellick and Depaoli executed an agreement declaring that they each held a one-half undivided interest in property held by either of them (A-8). At this point, it appears that the entire Woodworth parcel was in the hands of Depaoli and Combellick.

Combellick deeded his interest in the property to Depaoli on March 13, 1914 (C-44). Depaoli entered into a sales agreement with Marsilio Sorani and Constantino Benedetti for Parcels A and B on January 30, 1915, excepting from the transaction "all that portion of the property lying on the "Northerly side of the Southern Pacific Railroad track, together with the dwelling house" on that side of the tracks (C-45). This agreement also contained the purchasers' agreement to assume two mortgages taken out by Depaoli, one held by Alfred Chartz, and one held by Margaret Mack (these mortgages are not included because the mortgage books were not searched).

On March 21, 1918, Benedetti assigned his one-half interest in the property to Alfred Chartz (C-46, C-47). These documents appear to be redundant, except that C-45 does not include Parcel B. Both documents are dated and recorded at the same time. Alfred Chartz agreed to transfer this interest to Marsilio Sorani and Cesira Sorani on March 10, 1919 (C-48). A deed on this same date from Depaoli's estate to Sorani conveys the entire interest in Parcels A and B to Sorani in consideration of the outstanding mortgage balance (C-49).

At this point there is an unexplained gap in the title history. The property again falls into the hands of the Chartz family through means which are not documented. On October 19, 1943, Emma Chartz, apparently the widow of Alfred Chartz, conveyed the property to her children, Helen Haley, Beatrice Chartz and John M. Chartz (C-50). The Chartz children conveyed the property to Pio Quilici on January 1, 1948 (C-51). Quilici, in turn, granted it to Mary Louise Darling on July 26, 1950 (C-52). There was an action to quiet title decided in 1953, which, although it did not affect the ownership of these parcels, resulted in a correcting deed from Quilici to Darling on August 3, 1953 (C-53).

Darling and her husband, Blake Darling, conveyed the property to **FX-6 Personal** **FX-6 Personal Privacy** on February 14, 1955 (C-54). In an agreement dated October 10, 1975 (not searched), **FX-6 Personal** transferred the property into the **FX-6 Personal** **FX-6 Personal Privacy**. On November 8, 1983, **FX-6 Personal** as co-trustees of the Trust, conveyed the property to **FX-6 Personal Privacy** (C-55), a Nevada general partnership, completing the title history for this property. The current assessed owners of the historic millsite parcels are:

Current Assessed Owners

Parcel No.

Owner

16-261-03
16-261-05
16-261-06
16-261-07

16-261-04

06-111-01

06-111-02

06-112-01

FX-6 Personal Privacy

06-112-02

FX-6 Personal Privacy

06-112-04

06-112-05

06-112-06

06-112-27

16-151-06

16-151-20

16-151-37

Bureau of Land Management

16-151-40

Bureau of Land Management

none

State of Nevada Department of
Transportation (land under
Highway 50)

The title tree, title abstract, and Preliminary Millsite Map for the Woodworth Millsite follow. The title documents are contained in Attachment II.

WOODWORTH MILLSITE

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|-------------------|---|--|--|-------------------------------|-------------|-------------|-----------------------------------|
| 07-23-1860 | Deed | Joseph W. Hastings | John B. Winters | 300 acres and mill 1/10 operated by Woodworth, Stewart, Hastings and others | 10-04-1860 | CCR Deeds C | 215-216 | Also LC/CCR Deeds A/153-155 (C-1) |
| 07-23-1860 | Mtg. | John B. Winters | Joseph W. Hastings | against 1/10 of 300+ acres | 10-01-1860 | CCR Deeds B | 621-623 | (C-2) |
| 07-23-1860 | Deed | Joseph Woodworth | Joseph W. Hastings | 32½ / 100 of 320 acres and quartz mill operated by Hastings Stewart and Woodworth | 03-14-1861 | CCR Deeds A | 347 | Also LC/CCR Deeds A/355-357 (C-3) |
| 08-08-1860 | Mtg. | Joseph Mosheimer Guido Kustel | Mrs. Mary Klein | against Woodworth & Hastings Quartz mill (10-stamps) and land (+30 Hungarian amalgomators) | 10-01-1860 | CCR Deeds B | 623-626 | (C-4) |
| 08-09-1860 | Art. of Agreement | Quartz Mill of the Carson River Mining Company dba J. W. Hastings & Co. | Guido Kustel Joseph Mosheimer dba Mosheimer & Kustel | 3 year lease for ground & water to erect and run a 10-stamp mill | 10-02-1860 Carson City Co. | CCR Deeds B | 626-627 | (C-5) |
| 09-08-1860 | Agreement | Mosheimer & Kustel | Joseph Sorber | Sorber paid \$4,000 to enlarge Mosheimer & Kustel mill aka Woodworth & Hastings mill. Conveys 1/4 of 10 stamp mill to Sorber | 04-24-1861 | CCR Powers | 104 | (C-6) |
| 09-21-1860 | Deed | Joseph Woodworth | William Stewart | 17½ / 100 as in A/113-115 | 10-02-1860 | CCR Deeds B | 637-638 | Also LC/CCR Deeds A/115-117 (C-7) |

WOODWORTH MILLSITE (continued)

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|-----------------------|----------------------------|---|---|--|---------------|-------------------|-------------|--|
| 09-21-1860 | Deed | Joseph Woodworth | William Stewart Joseph W. Hastings John B. Winters | 30/100 as in A/113-115 | 10-02-1860 | CCR Deeds A | 638- 639 | Also LC/CCR Deeds A/117-119 (C-8) |
| 09-21-1860 | Deed | James Walsh | Joseph Woodworth | $\frac{1}{2}$ of $37\frac{1}{2}$ / 100 Mill and Property of Woodworth and Company (320 acres) | 10-01-1860 | CCR Deeds B | 635- 636 | Also LC/CCR Deeds A/113-115 (C-9) |
| 09-24-1860 | Mtg. | William Stuart Joseph W. Hastings John B. Winters | Joseph Woodworth | against mill and property of Woodworth & Co. (320 acres) | 10-03-1860 | CCR Deeds B | 205- 206 | (C-10) |
| 09-24-1860 | Mtg. | John B. Winters | Joseph W. Hastings | against shares of millsite (320 acres) and mill of Woodworth & Co. | 10-24-1860 | CCR Deeds B | 303- 304 | (C-11) |
| 09-29-1860 | Deed | William Stuart | John B. Winters | $8\text{-}3/4$ / 100 Mill of the Woodworth and Company and 320 acres | 01-19-1861 | CCR Deeds C | 535- 536 | Also LC/CCR Deeds A/209-211 (C-17) |
| 10-29 & 10-30-1860 | Survey of Land Claim | County Surveyor | Joseph W. Hastings John B. Winters William Stuart | 525.79 acres including mill house and stable | 11-26-1860 | CCR Deeds D | 001 | (C-12) |
| 12-03-1860 | Mtg. | John R. Harold John Drynan | Joseph W. Hastings | against $42\frac{1}{2}$ / 100 of Quartz Mill and millsite of Woodworth, Walsh & Co. | 12-15-1860 | CCR Deeds C | 470- 471 | (C-13) |
| 12-03-1860 | Deed | J. W. Hastings | John R. Harold John Drynan | $42\frac{1}{2}$ / 100 location made by Woodworth, Walsh and Company also quartz mill now erected Deed incumbent on mortgage | 12-15-1860 | CCR Deeds C | 471- 473 | Also LC/CCR Deeds A/191-192 (C-14) |

WOODWORTH MILLSITE (continued)

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|---------------|---|--|---|---------------|-------------|-------------|------------------------------------|
| 12-03-1860 | Deed | J. W. Hastings | John R. Harold John Drynan | 41½ / 100 of location made by Woodworth, Walsh & Company and Quartz Mill now erected (encumbered by mortgage) | 03-19-1861 | CCR Morse A | 372-373 | Also LC/CCR Deeds A/369-371 (C-15) |
| 12-04-1860 | Deed | Guido Kustel Joseph Mosheimer | John B. Winters | ½ "Mosheimer Mill" consisting of 10 stamp Quartz Crushing Mill and Amalgomators and rights granted in B/626 | 12-12-1860 | CCR Morse A | 095 | Also LC/CCR Deeds A/293-295 (C-16) |
| 01-01-1861 | Deed of Trust | John R. Harold | John Drynan | ½ of 42½ / 100 of mill and millsite formerly owned by Woodworth, Walsh & Co. | 01-05-1861 | CCR Deeds C | 502-504 | (C-18) |
| 01-01-1861 | Mtg. | John R. Harold | John Drynan | ½ of 42½ / 100 of mill and millsite formerly owned by Woodworth, Walsh & Co. | 03-19-1861 | CCR Mtg. A | 057-058 | (C-19) |
| 05-01-1861 | Mtg. | Joseph Woodworth | John Drynan | 42½ / 100 of millsite location made by Woodworth, Walsh & Co. | 05-20-1861 | CCR Deeds C | 726-727 | (C-20) |
| 05-01-1861 | Mtg. | Joseph Woodworth | John Drynan | 42½ / 100 of millsite location made by Woodworth, Walsh & Co. | 05-20-1861 | CCR Mtg. | 108 | (C-21) |
| 05-20-1861 | Satisfaction | John Drynan | | notation in margin regarding satisfaction of D/T at CCR Mtg. A/57 | | CCR Mtg. A | 057 | (C-19) |
| 03-01-1862 | Deed | John B. Winters | William Stewart | 28-3/4 / 100 Woodworth & Walsh location | 03-04-1862 | Deeds A | 001-002 | (C-22) |
| 01-13-1863 | Deed | John B. Winters William Stuart Joseph Woodworth | Ophir Silver Mining Company (CA Corp.) | 525.79 acres and Quartz Mill | 02-04-1863 | Deeds A | 683-685 | (C-23) |

WOODWORTH MILL SITE (continued)

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|-----------------|--|--|--|---------------|-------------|-------------|-----------------|
| 10-10-1866 | Patent | United States of America | William M. Brisbois | SW 1/4 of SW 1/4 Section 26 (40 acres) (Certificate 1B) | 07-18-1867 | Deeds F | 076 | (C-24) |
| 10-10-1866 | Patent | United States of America | William M. Brisbois | SE 1/4 Section 27 (160 acres) (Certificate 1E) | 07-18-1867 | Deeds F | 078 | (C-25) |
| 10-10-1866 | Patent | United States of America | William M. Brisbois | N 1/2 of SW 1/4 Section 26 (80 acres) (Certificate 1C) | 07-18-1867 | Deeds F | 077 | (C-26) |
| 06-01-1867 | Deed | Lucy Frazier | Ophir Silver Mining Company | SE 1/4 of NE 1/4 Section 27 SW 1/4 of NW 1/4 Section 26 | 07-18-1867 | Deeds F | 079-080 | (C-27) |
| 06-28-1867 | Deed | William M. Brisbois | Ophir Silver Mining Company | patents in Certificates 1A, 1B, 1C, and 1E. | 07-18-1867 | Deeds F | 080-082 | (C-28) |
| 10-23-1869 | Deed | Ophir Silver Mining Company (California corporation) | W. S. Hobart | Carson River Mining Company, Woodworth or Ophir Mill interests in G/022-024 (Parcel A) | 12-21-1869 | Deeds F | 665-667 | (C-29) |
| 06-14-1870 | Deed | W. S. Hobart | 3/16 James C. Flood and W. D. O'Brien dba Flood & O'Brien 3/16 J. W. MacKay 1/8 J. G. Fair | 1/2 Woodworth Mill and 529 acres Also 1/2 flume used to carry tailings to mill from Silver City | 06-24-1870 | Deeds G | 014-016 | (C-30) |
| 07-01-1870 | (Mortgage) Deed | W. S. Hobart | L. P. Drexler | 1/2 tailings sent down flume 1/2 Woodworth Mill + 525 acres | 07-08-1870 | Deeds G | 022-024 | (C-31) |
| 07-01-1870 | (AGT) | L. P. Drexler | W. S. Hobart | Clarification of indebtedness regarding G/022-024 | 07-08-1870 | Deeds G | 024-025 | (C-32) |

WOODWORTH MILLSITE (continued)

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|------|--|---------------------------------|---|---------------|-------------|-------------|-----------------|
| 09-12-1870 | Deed | L. P. Drexler | W. S. Hobart | 1/2 Woodworth Mill + 525 acres | 09-13-1870 | Deeds G | 069-071 | (C-33) |
| 09-13-1870 | Deed | W. S. Hobart | John W. Mackay J.G. Fair | 1/2 tailings carried by flume 1/2 Woodworth Mill and 525 acres (intended as mortgage according to G/484) | 09-13-1870 | Deeds G | 071-072 | (C-34) |
| 01-06-1872 | Deed | John W. MacKay James G. Fair | W. S. Hobart | 1/2 525 acres and Woodworth mill | 02-07-1872 | Deeds G | 484-486 | (C-35) |
| 12-15-1875 | Deed | W. S. Hobart | Nevada Bank of San Francisco | 1/2 Woodworth Mill + 529 acres (recorded at request of Wells Fargo and Company) | 12-20-1875 | Deeds H | 284-285 | (C-36) |
| 12-22-1875 | Deed | James G. Fair | Pacific Mill and Mining Company | 1/2 SW 1/4 of NW 1/4 Section 26 (Parcel B) (Recorded at request of Wells Fargo Co.) | 12-28-1875 | Deeds H | 287 | (C-37) |
| 12-22-1875 | Deed | James G. Fair | Nevada Bank of San Francisco | 1/2 SW 1/4 of NW 1/4 Section 26 (Parcel B) (Recorded at request of Wells Fargo & Co.) | 12-28-1875 | Deeds H | 288 | (C-38) |
| 01-02-1904 | Deed | Pacific Mill and Mining Company Hobart Estate Company | W. J. Westerfield | Parcel known as Woodworth Mill property SW 1/4 of NW 1/4 Section 26 (Reference to Hastings and Company's quartz mill) | 04-18-1904 | Deeds N | 660-662 | (C-39) |
| 01-18-1904 | Deed | Louise Mackay Clarence H. Mackay | W. J. Westerfield | Parcel A in F/665 Parcel B | 04-18-1904 | Deeds N | 663-665 | (C-40) |
| 01-21-1904 | Deed | Theresa A. Oelrichs Virginia Vanderbilt James L. Flood | W. J. Westerfield | Parcel A in F/665 Parcel B | 04-18-1904 | Deeds N | 665-667 | (C-41) |

WOODWORTH MINING SITE (continued)

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|-----------------|---|--|---|---------------|-------------|-------------|------------------------------|
| 04-16-1904 | Deed | W. J. Westerfield | Henry Combellick | Parcel A Parcel B | 04-18-1904 | Deeds N | 667- 668 | (C-42) |
| 07-05-1905 | Deed | Ophir Silver Mining Company (CA Corp.) | Henry Combellick John Depaoli | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 | 07-11-1905 | Deeds O | 033 | (C-43) |
| 03-13-1914 | GBS Deed | Henry Combellick | John Depaoli | 1/2 of SE 1/4 Section 27 1/2 of W 1/2 of SW 1/4 Section 26 | 03-24-1914 | Deeds S | 378 | (C-44) |
| 01-30-1915 | Sales Agt. | John Depaoli | Marsilio Sorani Costantino Benedetti | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 (Parcels A & B) | 02-06-1915 | Misc J | 052- 055 | Document #12334 (C-45) |
| 03-21-1918 | Assign- ment | Constantino Benedetti | Alfred Chartz | Assigns 1/2 of J/52 | 03-23-1918 | Misc J | 490- 493 | (C-46) |
| 03-21-1918 | Assign- ment | Constantino Benedetti | Alfred Chartz | Assigns 1/2 of Parcel A | 03-23-1918 | Misc J | 482- | (C-47) |
| 03-21-1918 | Agree- ment | Alfred Chartz | Marsilio Sorani Cesira Sorani | Assigns interest received by J/490 | 02-15-1919 | Misc J | 599- 600 | (C-48) |
| 03-10-1919 | Deed | Estate of John Depaoli | Marsillo Sorani | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 (Parcels A & B) | 03-13-1919 | Deeds U | 407- 409 | (C-49) |
| 10-19-1943 | Deed | Emma Chartz | Helen Haley Beatrice E. Chartz John M. Chartz | NE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 | 01-10-1944 | Deeds 32 | 537- 540 | Document #51035 (C-50) |
| 01-08-1948 | Deed | Helen Haley Beatrice E. Chartz John M. Chartz | Pio Quilici | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 Portion of NE 1/4 of SW 1/4 Section 26 | 01-24-1948 | Deeds 35 | 215- 218 | Document #55506 (C-51) |
| 07-26-1950 | Deed | Pio Quilici | Mary Louise Darling | See Deeds 38/218 368.83 acres | 09-23-1950 | Deeds 36 | 282- 283 | Document #58284 (C-52) |

WOODWORTH MILLSITE (continued)

| DATE | INST | GRANTOR | GRANTEE | PROPERTY & COMMENTS | DATE RECORDED | COUNTY BOOK | COUNTY PAGE | DOCUMENT NUMBER |
|------------|----------------|--------------------------------------|--------------------------|---|------------------|----------------|----------------|------------------------------|
| 09-01-1953 | Quiet Title | | | No useful information on file - regards 5 acre portion not next to mills | | | | Case #3432 |
| 09-08-1953 | Corr Deed | Pio Quilici | Mary Louise Darling | SE 1/4 Section 27 W 1/2 of SW 1/4 Section 26 Portion of NE 1/4 of SW 1/4 Section 26 | 09-11-1953 | Deeds 38 | 218- 220 | Document #64113 (C-53) |
| 02-14-1955 | Deed | Mary Louise Darling Blake Darling | FX-6 Personal Privacy | Property now known as FX-6 Personal Privacy | 07-03-1956 | Deeds 40 | 278- 280 | Document #70984 (C-54) |
| 10-10-1975 | Agt. | FX-6 Personal Privacy | FX-6 Personal Privacy | All property | | | | Not searched |
| 11-08-1983 | Deed | FX-6 Personal Privacy | FX-6 Personal Privacy | FX-6 Personal Privacy | 02-23-1984 | None | None | Document #83649 (C-55) |

SOURCE: NEVADA: THE
LAND OF SILVER

Nevada
On openlibrary.org

BY JOHN C. POWELL 1876

66

NEVADA.

many varieties, but in the chemistry of the operation there has been no change.

The foregoing description of the various milling processes by which the precious metals are extracted from the ore may be appropriately followed by a tabular statement of the number of the mills themselves, their capacity, etc. etc.

A List of Quartz and Tailing Mills

LYON, ORMSBY, AND STOREY COUNTIES, NEVADA.

LYON COUNTY.

| NAME | SITUATION | TONE CAPACITY | STAMPS |
|--------------|-------------|---------------|--------|
| Devil's Gate | Silver City | 24 | 12 |
| Pioneer | " | 30 | 15 |
| Bacon | " | 40 | 20 |
| Trench | " | 40 | 20 |
| Horn | " | 20 | 10 |
| Kelsey | " | 30 | 15 |
| Golden Age | " | 10 | 5 |
| Hope | " | 20 | 10 |
| Excelsior | Gold Cañon | 20 | 10 |
| Sacramento | " | 25 | 12 |

THE LAND OF SILVER.

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LYON COUNTY—(CONTINUED)

| NAME | SITUATION | TONS CAPACITY | STATUS |
|----------------|---------------|---------------|----------|
| Swansea | Gold Canon | 25 | 12 |
| Atlanta | " | 20 | 10 |
| Keystone | " | 30 | Tailings |
| Eureka | Carson River | 120 | 60 |
| Franklin | " | 40 | 20 |
| Woodworth | " | 48 | 24 |
| Island | " | 20 | 10 |
| Carson Valley | " | 300 | Tailings |
| Daguer | " | 25 | " |
| Birdsall & Co. | Dayton | 300 | " |
| Reservoir | " | 50 | " |
| Rock Point | " | 112 | 56 |
| Spring Valley | Spring Valley | 20 | 10 |
| Dancy | " | 30 | 15 |

ORMSBY COUNTY.

| NAME | LOCATION | MOTIVE | WATER | PAVE | SETTLERS | W. T. D. Y. |
|---------------|--------------|--------|-------|------|----------|-------------|
| Mexican | Empire | Water | 44 | 20 | 10 | 120 |
| Yellow Jacket | " | Steam | 40 | 13 | 6 | 75 |
| Brunswick | Carson River | Water | 56 | 26 | 13 | 150 |
| Merrimac | " | " | 20 | 13 | 6 | 45 |
| Vivian | " | " | 16 | 8 | 2 | 40 |
| Santiago | " | " | 34 | 9 | 18 | 80 |

These mills are all kept running on Comstock ores brought from the mines and delivered by the Virginia and Truckee Railroad.

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NEVADA

STOREY COUNTY.

| NAME | LOCATION | MOTIVE | START | END DAY |
|-----------------------|------------------|--------|-------|---------|
| Boston | Gold Canon | Steam | 5 | |
| Ione | " | " | 5 | 15 |
| Succor | " | " | 15 | 25 |
| Ramada | " | " | 2 | 5 |
| Pacific | " | " | 30 | 70 |
| Pappoose | " | " | 5 | 14 |
| Piute | Lower Gold Hill | " | 20 | 50 |
| Douglas | " | " | 15 | 30 |
| Atlas | " | " | 15 | 45 |
| Petaluma | " | " | 24 | 75 |
| Sapphire | " | " | 15 | 40 |
| Rhode Island | " | " | 25 | 50 |
| Gold Hill Quartz | " | " | 8 | 18 |
| Sunderland | " | " | 10 | 25 |
| Hoosier State | Virginia | " | 18 | 40 |
| Sierra Nevada | " | " | 20 | 50 |
| Evans | Seven-mile Can. | " | 5 | 13 |
| Mariposa | " | " | 12 | 30 |
| Sacramento & Meredith | Cedar Hill | " | 20 | 50 |
| Winfield | Seven-mile Can. | " | 20 | 50 |
| Atlantic | " | " | 12 | 30 |
| Landy | " | " | 20 | 50 |
| De Lands | Six-mile Cañon | " | 15 | 35 |
| Nevada | Virginia | " | 20 | 50 |
| Empire State | Six-mile Cañon | " | 15 | 40 |
| Park & Bowie No. 1 | " | " | | |
| Park & Bowie No. 2 | " | " | | |
| Occidental | Silver Star Dist | " | 20 | 50 |
| Lady Bryan | Six-mile Cañon | " | 10 | |

necessary to sink several hundred feet further to obtain the same. Powerful hoisting works have been erected at each one of the shafts. In No. 2 a large amount of water has been encountered. When pumps are allowed to stop it rises to within three hundred feet of surface. A large machine shop has been erected at Sutro for the manufacture of all the machinery to be used by the company. There is here a store supplied with everything necessary for use at the different works. These are issued as they are needed. The formations through which the tunnel has passed so far, are: for the first seven hundred and fifty feet, conglomerate; then trachyte three hundred and fifty feet; after this a belt of clay one hundred and fifty feet; and then comes one thousand seven hundred and fifty feet of porphyry; then three hundred and ten feet of trachyte. It is calculated that the tunnel will be completed to the Comstock lode in from two to two and a half years from the present time, providing no unlooked for obstacles are met with in the prosecution of the work.

MILLS.

The following list of quartz and tailing mills was made by Mr. George McFadden, County Assessor:

| Name. | Situation. | Capacity, tons. | Stamps. | Condition. |
|--------------------|------------------|-----------------|-----------|------------|
| Devil's Gate..... | Silver City..... | 24 | 12 | running |
| Pioneer..... | Silver City..... | 30 | 15 | running |
| Bacon..... | Silver City..... | 40 | 20 | running |
| Trench..... | Silver City..... | 40 | 20 | running |
| Horn..... | Silver City..... | 20 | 10 | running |
| Kelsey..... | Silver City..... | 30 | 15 | running |
| Golden Age..... | Silver City..... | 10 | 5 | running |
| Hope..... | Silver City..... | 20 | 10 | running |
| Excelsior..... | Gold Cañon..... | 20 | 10 | running |
| Sacramento..... | Gold Cañon..... | 25 | 12 | idle |
| Swansea..... | Gold Cañon..... | 25 | 12 | idle |
| Atlanta..... | Gold Cañon..... | 20 | 10 | running |
| Keystone..... | Gold Cañon..... | 30 | Tailings. | running |
| Bureka..... | Carson River... | 120 | 60 | running |
| Franklin..... | Carson River... | 40 | 20 | running |
| Woodworth..... | Carson River... | 48 | 24 | running |
| Island..... | Carson River... | 20 | 10 | idle |
| Carson Valley..... | Carson River... | 300 | Tailings. | running |
| Desert..... | Carson River... | 25 | Tailings. | running |
| Birdsall & Co..... | Dayton..... | 300 | Tailings. | running |
| Reservoir..... | Dayton..... | 50 | Tailings. | running |
| Rock Point..... | Dayton..... | 112 | 56 | idle |
| Spring Valley..... | Spring Valley... | 20 | 10 | running |
| Daney..... | Spring Valley... | 30 | 15 | idle |

NEVADA

1871 & 1872

DEVIL'S GATE DISTRICT

Is situated in Gold Cañon. Silver City is about its central point. Mines here were worked several years ago, but for a long time were idle, and some of them abandoned. Work, however, has resumed here lately, and the prospects of this district never more encouraging than the present.

DAYTON.

This mine is located in Silver City, on the south side of the town. The old works on this mine are a tunnel, in which a shaft was sunk to a depth of one hundred feet. A new shaft has been started, which has reached a depth of one hundred feet. Now steam hoisting works are to be erected in the Spring. Ore from this mine is extracted in sufficient quantity to keep the Atlanta Mill—ten stamps—constantly running. This is one of the earliest locations in the district. Nothing was done on this mine for a number of years. During the past Summer work was resumed—works cleaned out, and a new shaft commenced.

BUCKEYE.

This mine is located one mile east of Silver City, in Long's Ravine. It is also one of the old locations. Steam hoisting works have been erected here, but everything was abandoned, and nothing done for a long time. Two years ago work was resumed, and now steam hoisting works are erected. An incline is down a distance of six hundred feet. Two stamps, Horn and Hope, each ten-stamp, are supplied with ore from this mine. Water in considerable quantities is found, requiring an eight-inch pipe to keep the mine clear. This water is carried by flumes around to Silver City, and supplies the Bacon and Trench Mills.

COOK & GEYER.

This mine is located about three quarters of a mile north of Silver City. A great amount of work was done on it last Summer, and it has been idle here kept the Franklin Mill running. It has been idle for the last three months, but work will soon be resumed again.

DANEY.

This mine has been abandoned. Some good ore was here near the surface, and worked out years ago. Since that time hundreds of thousands of dollars have been expended in prospecting for other bodies of ore, but nothing of any consequence has been found. Work has been stopped and renewed again several times. During the excitement of the Spring the owners were again inspired with the hope of finding something in this mine, but after several months of work they have given up and will remove the hoisting works and other material of value.

BELCHER.

Within the past two years twenty thousand tons of ore, yielding on an average \$17 per ton, have been obtained from this mine, nearly all from the upper levels. The deepest openings are eight hundred and fifty feet below the surface. At this depth the vein is nearly barren, showing only traces of gold and silver.

LUCERNE MINE.

This mine is situated near Devil's Gate, Silver City, southeast from Gold Hill. It is opened by a shaft and tunnels to the depth of three hundred feet. The vein is well defined and the walls have clay linings. The ore produces on an average \$10 per ton. The bullion assays \$3 50 per ounce in silver, and \$6 50 in gold. The ore is easily reduced, and the mine is worked without difficulty. The vein dips east about 45°. The country rock on the west is granite; on the east it is propolite.

WALLER'S DEFEAT, ST. LOUIS, SUCCOR,

And other mines are on the same vein, and are worked very similarly to the Lucerne, and have the same characteristics and productiveness.

LYON COUNTY.

The natural resources described in my last report as peculiar to this county, have undergone but little change. Some developments have been made, but the results are not particularly marked. Public schools and churches have been prospered, and some improvements are perceptible.

The official returns fix the popular vote, at the last general election, at six hundred and thirteen, being two hundred and eighteen less than the vote cast two years ago.

The mines in Spring Valley District, three miles west from Dayton, have recently received some attention—several abandoned claims have been relocated, and a mill with ten stamps is being erected.

In Devil's Gate District, ore of a low grade is being extracted from the Hope, Buckeye and other mines. These mines were never developed to a great extent, and will probably produce large quantities of ore.

Owing to the fine water privileges afforded by the Carson River, and the facilities of access to the mines, principally in Storey County, there are a large number of mills in Lyon County.

The Atlanta has ten stamps and six pans.
The Birdsell has thirty stamps and forty pans.
The Bacon has twenty stamps and ten pans.
The Carson Valley has twenty stamps and ten pans.
The Daney has twenty stamps and ten pans.
Dayton Reduction has six pans.
Devil's Gate has twelve stamps and ten pans.
Excelsior has ten stamps and twenty pans.
Eureka has twenty stamps and eight pans.
Eagle Mill has two pans and four arastras.
Franklin has ten stamps and four pans.

Hope has ten stamps and six pans.
Island has ten stamps and four pans.
Illinois has twenty stamps and six pans.
Keystone has five stamps and six pans.
Kelsey has fifteen stamps and six pans.
Pioneer has fifteen stamps and ten pans.
Phoenix has fifteen stamps and ten pans.
Rock Point has fifty-six stamps and forty-three pans.
Swansea has twelve stamps and ten pans.
Sacramento has fifteen stamps and eight pans.
San Francisco has ten stamps and eight pans.
Sherman has five stamps and four pans.
Tailings Mill has two pans.
Woodworth has twenty-four stamps and twelve pans.
Winter's has two stamps, two pans and two arastras.
Weston has fifteen stamps and nine pans.
French has twenty stamps and eighteen pans.
The copper mines, twenty-five miles southeast from Dayton, are not worked.

SUTRO TUNNEL.

This tunnel was commenced in 1869, and has been prosecuted with commendable energy. It is run westward from the face of the foot-hills north of Dayton, so as to intersect the Comstock ledge at right angles at the depth of two thousand one hundred and seventy-two feet. It has been driven sixteen hundred and fifty feet. A stream, affording about twenty-five inches of water, flows from it. No valuable veins of ore have as yet been found.

It is proper to state that a large number of the mills are not running, the supply of ore having ceased.

CHURCHILL COUNTY.

There has been but little progress in the developments of the natural resources of this county within the past two years. The completion of the Central Pacific Railroad withdrew the travel and transportation almost entirely from the Overland Mail Road; consequently business ceased, and many of the stations along that road have been abandoned. The agricultural lands along the Carson River and about the Carson Lake and Sink have produced well.

The popular vote of the county at the late general election was eighty-seven; sixty-four votes less than were cast in November, 1868.

The soda mine, near Ragtown, has been opened to the depth of twelve or fifteen feet. It is situated in a small basin on the southwestern border of the desert surrounding the sink of the Carson and Humboldt Rivers. There is a pond or small lake near by, perhaps three quarters of a mile in length and from a quarter to half a mile in width, and said to be of great depth.

The water collects in the soda basin during the rainy season, and afterward gradually evaporates, leaving the soda beautifully crystalized over a space of from one to two acres in extent. From the developments recently made, it seems that this deposit has an unknown depth, and consists

Tabular list of mills crushing ore from mines

on the Comstock lode during the year 1866.

| Names. | Owners. | Location. | When built. | Estimated cost. | Horse power. | STAMPS. | | | Kind. | Diameter, feet. | WHEELS. | | WATER. | | WOOD. | |
|---------------------|----------------------------|-----------------------------|-------------|-----------------|--------------|---------|--------------------------|-----------------|---------------------|-------------------|----------------------|-------------|-----------------|----------------|----------------|--|
| | | | | | | Number. | Weight, pounds. | Drop in inches. | | | Drop per minute. | Fall, feet. | Amount, inches. | Cords per day. | Cost per cord. | |
| STOREY COUNTY. | | | | | | | | | | | | | | | | |
| Atlas | Haggin & Tavis | Lower Gold Hill | 1861 | \$35,000 | 36 | 15 | 600 | | | | | | | | | |
| Atwood's | George Atwood | Flowery (Six Mile-Creek) | | 35,000 | | 16 | | | | | | | | | | |
| Bay State | Bay State Mill Co. | American Flat | | 40,000 | | 23 | | | | | | | | | | |
| Bowers | L. S. Bowers | Crown Point Ravine, (G. H.) | | 100,000 | | 20 | { 10-600 } { 10-700 } | 9 | 70 | | | | | | | |
| Central | J. B. Dickenson | Virginia | | 75,000 | | 13 | | | | | | | | | | |
| Crown Point (1) | Crown Point G. & S. M. Co. | Crown Point Ravine, (G. H.) | 1862 | 40,000 | 35 | 8 | 500 | 9 | 70 | | | | | | | |
| Comet (1) | New York & Nevada M. Co. | Gold Hill | | 40,000 | | 10 | 650 | 8 | 78 | | | | | | | |
| Douglas (1) | C. S. Wheeler | Lower Gold Hill | 1862 | 40,000 | | 10 | | | | | | | | | | |
| Eclipse | Eclipse M. & M. Co. | Gold Hill | | 50,000 | | 15 | | | | | | | | | | |
| Empire State | Wm. Sharon, Agent | Seven Mile Cañon | | 35,000 | | 15 | | | | | | | | | | |
| Empire No. 1 (1) | W. S. Hobart | Virginia | 1860 | 75,000 | 60 | 16 | 650 | 9 | 80 | | | | | | | |
| Empire No. 2 (1) | Empire M. & M. Co. | Lower Gold Hill | 1860 | 80,000 | 60 | 16 | 650 | 9 | 80 | | | | | | | |
| Gold Hill | Gold Hill Q. M. & M. Co. | Gold Hill | 1860 | 30,000 | 45 | 14 | { 6-750 } { 8-600 } | 7 | 84 | | | | | | | |
| Gould & Curry | Gould & Curry M. Co. | Seven Mile Cañon | | 380,000 | | 80 | | | | | | | | | | |
| Hoover State | Clark & Hearst | Virginia | 1862 | 40,000 | 20 | 8 | 750 | 9 | 70 | | | | | | | |
| Imperial | Imperial S. M. Co. | Lower Gold Hill | 1860 | 75,000 | 60 | 44 | 600 | 8 | | | | | | | | |
| Leah's | Charles Land | Seven Mile Cañon | | 60,000 | | 20 | | | | | | | | | | |
| Mariposa | J. V. McCurdy | do | | 20,000 | | (1) 12 | | | | | | | | | | |
| Marysville (1) | O'Neale, Rule & Glasier | Lower Gold Hill | | 50,000 | | 9 | | | | | | | | | | |
| Ogden | O. S. Carvill | Virginia | | 50,000 | | 32 | | | | | | | | | | |
| Pacific | Sharon & Co. | Lower Gold Hill | 1863 | 75,000 | 80 | 30 | 650 | 10 | 73 | | | | | | | |
| Petaluma (1) | Greely Bros | do | | 30,000 | | 30 | 700 | | | | | | | | | |
| Pine | M. Livingston | do | 1863 | 80,000 | 60 | 20 | 660 | 10 | 80 | | | | | | | |
| Rhode Island | Crown Point G. & S. M. Co. | Gold Hill | 1862 | 100,000 | (1) 150 | 25 | 650 | 10 | 80 | | | | | | | |
| Rigby's (1) | Rigby & Co. | American Flat | | 25,000 | | 10 | | | | | | | | | | |
| Rogers's (1) | Rogers S. M. Co. | Seven Mile Cañon | 1862 | 25,000 | | 8 | | | | | | | | | | |
| Seppine | W. S. Hobart | Lower Gold Hill | 1861 | 60,000 | 45 | 16 | 750 | 9 | 80 | | | | | | | |
| Simcoe | A. Bassett & Co. | Seven Mile Cañon | | 35,000 | | 16 | | | | | | | | | | |
| Stevensson's (1) | C. O. Stevenson | Gold Hill | 1860 | 15,000 | (2) 8 | 8 | 500 | 6 | 76 | | | | | | | |
| Suctor (1) | O'Neale, Rule & Co. | Lower Gold Hill | | 50,000 | | 20 | 625 | | 70 | | | | | | | |
| Summit | Mason, Carville & Wright | Virginia | (1) | 50,000 | | 20 | | | | | | | | | | |
| Union | Wm. Kidd | Gold Hill | 1861 | 25,000 | 40 | 14 | { 10-650 } { 4-500 } | 10 | 60 | | | | | | | |
| Winfield | L. A. Booth | Seven Mile Cañon | | 80,000 | | 18 | | | | | | | | | | |
| Total | 33 | | | 2,000,000 | 607 | | | | | | | | | | 1804 | |
| LYON COUNTY. | | | | | | | | | | | | | | | | |
| Bacon | Lotze & Fair | Silver City | 1863 | \$85,000 | 60 | 20 | 720 | 10 | 75 | | | | | | | |
| Birdall & Carpenter | Birdall & Carpenter | Dayton | 1865 | (1) 110,000 | 30 | 30 | 613 | 9 | 85 | Overshot | 50 | | | | | |
| Cole & Co. | Cole & Co. | Johnstown | 1864 | 10,000 | 20 | 5 | 488 | 9 | 65 | | | | | | | |
| Confidence | Confidence M. Co. | Silver City | 1861 | 35,000 | 35 | (1) 12 | 900 | | | | | | | | | |
| Dayton No. 1 | Winters, Kistell & Co. | Dayton | 1861 | 50,000 | 20 | 600 | 10 | 75 | 2—central discharge | 54 | 12 | 1,500 | | | | |
| Dayton No. 2 (1) | do | do | 1864 | 40,000 | 60 | 15 | 800 | 10 | 75 | | | | | | | |
| Davey | Dancy M. & M. Co. | 3 miles from Dayton | 1863 | 70,000 | 45 | 15 | 550 | | | | | | | | | |
| Eagle | Stevenson, Winters & Co. | Silver City | 1864 | 60,000 | 5 | 400 | | | | Overshot | 37 | 100 | | | | |
| Eastern Slope | Wheeler, Hurd & Dunker | Below Silver City | 1862 | 100,000 | 60 | 12 | 1,100 | 10 | 50 | | | | | | | |
| Eureka | John Briggs | Carson River, near Dayton | 1861 | 25,000 | 40 | 10 | 650 | | | Turbine | | 2,500 | | | | |
| Excelsior | Wm. Sharon, agent | Johnstown | 1861 | 50,000 | 10 | 600 | | | | Central discharge | | 2,500 | | | | |
| Franklin | Wm. Sharon, agent | Carson River, near Dayton | 1861 | 40,000 | 30 | 15 | 700 | 9 | 75 | | | | | | | |
| Golden Eagle | O'Neale, Rule & Co. | Silver City | 1861 | 40,000 | 40 | 10 | 850 | | | | | | | | | |
| Golden Eagle | Wm. Sharon, agent | Carson River, near Dayton | 1861 | 30,000 | 30 | 20 | 400 | | | | | | | | | |
| Imperial (Rock Pt) | Imperial M. Co. | do | 1861 | 250,000 | 50 | 56 | { 16-600 } { 40-550 } | 8 | 80 | 2—Overshot | { 1-14 } { 1-13 } | 14 | 3,600 | | | |
| Inland | O'Neale, Rule & Co. | do | 1862 | 40,000 | 25 | 10 | 720 | | | Central discharge | 2 4-5 | 1,800 | | | | |
| Monitor | Hirschman & Co. | Gold Cañon, near Dayton | 1865 | 8,000 | 5 | 450 | | | | | | 32 | 32 | 1,200 | | |
| Ophir (New) | Ophir S. M. Co. | Carson River | 1864 | 75,000 | 40 | 24 | 650 | | | Turbine | 10 | 14 | | | | |
| Phoenix No. 1 (1) | Hentch and Berton | Below Silver City | 1861 | 40,000 | 45 | 16 | 650 | | | | | | | | | |
| Pioneer (1) | Sheldon & Hickok | Silver City | 1861 | 40,000 | 40 | 12 | 750 | | | | | | | | | |
| Sacramento (1) | Hunt, Woodruff & Co. | Johnstown | 1861 | 80,000 | 30 | 10 | 650 | | | Central discharge | 10 | | 1,100 | | | |
| San Francisco | Charles Schad | Carson River, near Dayton | 1861 | 40,000 | 40 | 12 | 900 | | | | | | | | | |
| Swansea | W. Sharon, agent | Johnstown | 1862 | 60,000 | | | | | | | | | | | | |

Tabular list of mills crushing ore from mines and smelters during the year 1866—Continued.

| Names. | Owners. | Location. | When built. | Tons capacity. | Miles from mine. | Cost of water per month. | Tubs. | PANS. | | | | Settlers. | Agitators. | Breakers. | Grinders. | Crushing capacity per month, tons. | |
|----------------------------|----------------------------|-----------------------------|-------------|----------------|------------------|--------------------------|-------|-------|----------|----------|--------|-----------|------------|-----------|-----------|------------------------------------|--------|
| | | | | | | | | Knox. | Wheeler. | Hepburn. | Varny. | | | | | | |
| STOREY COUNTY. | | | | | | | | | | | | | | | | | |
| Atlas | Haggis & Tevis | Lower Gold Hill | 1861 | 25 | 1 | | | | | 8 | | 4 | | | | 750 | |
| Atwood's | George Atwood | Flowery (Six Mile Creek) | | 20 | 1 | \$250 | | | | | | 2 | | | | 000 | |
| Bay State | Bay State Mill Co | American Flat | | 35 | 2 | | | 20 | | | | | | | | 1,400 | |
| Bowers | L. S. Bowers | Crown Point Ravine, (G. H.) | | 25 | 1 | 250 | | | 14 | | | 7 | | | | 750 | |
| Central | J. B. Dickenson | Virginia | | 12 | 1 | 100 | | (2) | 30 | | | | 1 | | | 670 | |
| Crown Point (1) | Crown Point G. & S. M. Co | Crown Point Ravine, (G. H.) | 1862 | 20 | 0 | 100 | | | | (2) | 4 | (2) | 4 | | | 250 | |
| Comet (1) | New York & Nevada M. Co. | Gold Hill | | 20 | 0 | 75 | 6 | 8 | | | | | 1 | | | 600 | |
| Douglas (1) | C. S. Wheeler | Lower Gold Hill | 1862 | 16 | 1 | 850 | | | | | | | | | | 415 | |
| Eclipse | Eclipse M. & M. Co. | Gold Hill | | 25 | 0 | 75 | | | | | | | | 1 | | 700 | |
| Empire State | Wm. Sharon, agent | Seven Mile Cañon | | 15 | 3 | 300 | | | | | | 4 | | | 2 | 700 | |
| Empire No. 1 (1) | W. S. Hobart | Virginia | 1860 | 30 | 1 | 300 | | (1) | 20 | 2 | | | | | | *900 | |
| Empire No. 2 (1) | Empire M. & M. Co. | Lower Gold Hill | 1860 | 33 | 0 | 300 | | | | 12 | | 6 | | | | 1,000 | |
| Gold Hill | Gold Hill Q. M. & M. Co | Gold Hill | 1860 | 17 | 1 | 300 | | | | | | 4 | | | | 475 | |
| Gould & Curry | Gould & Curry M. Co. | Seven Mile Cañon | | 100 | 1 | 225 | (1) | 5 | 24 | | | | | | | 3,500 | |
| Hooder State | Clark & Hearst | Virginia | 1862 | 13 | 0 | 200 | | (1) | 24 | | | | 3 | | | 400 | |
| Imperial | Imperial S. M. Co. | Lower Gold Hill | 1860 | 30 | 1 | 300 | | | 74 | | | | 2 | | | 1,100 | |
| Land's | Charles Land | Seven Mile Cañon | | 30 | 3 | | | | | | | | | (B) | 1 | 2 | 1,000 |
| Mariposa | J. V. McCurdy | do | | 15 | 2 | 150 | | | 10 | | | (2) | 5 | | | 600 | |
| Marysville (1) | O'Neale, Rule & Glasier | Lower Gold Hill | | 18 | 1 | 75 | | | 2 | 6 | | | 3 | | | 500 | |
| Ogden | O. S. Carvill | Virginia | | 20 | 1 | | | | 12 | | | | 4 | | | 1,000 | |
| Pacific | Sharon & Co. | Lower Gold Hill | 1863 | 50 | 1 | 400 | | | 15 | | | (1) | 5 | | | 1,305 | |
| Petaluma (1) | Greely Bros. | do | | 12 | 1 | 150 | | | 18 | | | | 4 | 1 | | 300 | |
| Pinto | M. Livingston | do | 1863 | 40 | 1 | 300 | | | | 12 | | (1) | 6 | | | 1,200 | |
| Rhode Island | Crown Point G. & S. M. Co. | Gold Hill | 1862 | 50 | 1 | 400 | | (2) | 13 | 8 | | | 4 | 2 | 1 | 1,350 | |
| Rigby's (1) | Rigby & Co. | American Flat | | 13 | 2 | 150 | | | | | 5 | | | | | 400 | |
| Rogers (1) | Rogers S. M. Co. | Seven Mile Cañon | 1862 | 12 | 2 | | | | | | | | | | | 360 | |
| Sapphire | W. S. Hobart | Lower Gold Hill | 1861 | 28 | 1 | 250 | | | 56 | | | | 2 | 1 | (1) | 850 | |
| Sincooc | A. Bassett & Co. | Seven Mile Cañon | | 25 | 8 | | 2 | | (1) | 4 | 2 | | 3 | | | 700 | |
| Stevenson's (1) | C. O. Stevenson | Gold Hill | 1860 | 6 | 1 | 30 | | | 10 | (3) | 1 | | | | | 150 | |
| Succor (1) | O'Neale, Rule & Co. | Lower Gold Hill | | 20 | 2 | | | | | | 2 | | 1 | 1 | | 600 | |
| Summit | Mason, Carville & Wright | Virginia | (1) | 35 | 1 | 150 | | | 11 | | (2) | 1 | | 4 | 1 | 900 | |
| Union | Wm. Kidd | Gold Hill | 1861 | 14 | 1 | 300 | | | | | | | | 1 | | 400 | |
| Winfield | L. A. Booth | Seven Mile Cañon | | 30 | 3 | 200 | 14 | | | 8 | | | 4 | | (B) | 1 | 1,000 |
| Total | 33 | | | 846 | 48 | 5,380 | 27 | 305 | 91 | 93 | 9 | 101 | 17 | | 4 | 8 | 26,820 |
| LYON COUNTY. | | | | | | | | | | | | | | | | | |
| Bacon | Lowe & Fair | Silver City | 1863 | 30 | 3 | | | | | | | | 4 | | | | 1,900 |
| Birdsall & Carpenter | Birdsall & Carpenter | Dayton | 1865 | 75 | 7 | | | | | 17 | | | | | | | 125 |
| Cole & Co. J. | Cole & Co. | Johnstown | 1864 | 6 | 5 | | | | | 20 | | | (2) | 10 | | 5 | 650 |
| Confidence | Confidence M. Co. | Silver City | 1861 | 14 | 2 | | | | | 4 | | | | 2 | | | 500 |
| Dayton No. 1 | Winters, Kistell & Co. | Dayton | 1861 | 20 | 7 | | | | | | | | | | | | 800 |
| Dayton No. 2 (1) | do do | do | 1864 | 30 | 7 | | | | | 6 | | | (2) | 2 | (3) | 3 | 500 |
| Daney | Daney M. & M. Co. | 3 miles from Dayton | 1863 | 20 | 0 | | | | | | | | 8 | | | | 500 |
| Engle | Stevenson Winters & Co. | Silver City | 1864 | 14 | 3 | | \$15 | | | | | | | | | | 40 |
| Eastern Slope | Wheeler, Hurd & Dunker | Below Silver City | 1862 | 20 | 3 | | | | 2 | | | | | | | | 550 |
| Eureka | John Briggs | Carson River, near Dayton | 1861 | 22 | 0 | | | | | | 6 | | (1) | 3 | | 1 | 1,100 |
| Excelsior | Wm. Sharon, agent | Johnstown | 1861 | 18 | 5 | | | | 10 | | | | | 5 | | 2 | 430 |
| Franklin | Wm. Sharon, agent | Carson River, near Dayton | 1861 | 16 | 8 | | 5 | | 18 | | 2 | | | 1 | | | 500 |
| Gold Cañon Reduction Works | Wm. Sharon, agent | Silver City | 1861 | 25 | 3 | | | (1) | 7 | | 2 | | | 2 | | | 1,600 |
| Golden Eagle | O'Neale, Rule & Co. | Carson River, near Dayton | 1861 | 18 | 7 | | | | | | | | | | | | 500 |
| Illinois | Wm. Sharon, agent | do do | 1864 | 18 | 7 | | | | | 24 | | | | 1 | | | 500 |
| Imperial (Rock Pt.) | Imperial M. Co. | do do | 1861 | 90 | 7 | | | | | | 6 | | | 2 | | 3 | 12,400 |
| Island | O'Neale, Rule & Co. | do do | 1862 | 19 | 7 | | | (1) | 27 | | 14 | | (1) | 7 | | 3 | 500 |
| Monitor | Hirschman & Co. | Gold Cañon, near Dayton | 1865 | 3 | 7 | | | | | | | | | 3 | | | 750 |
| Opbir (New) | Opbir S. M. Co. | Carson River | 1864 | 40 | 7 | | | | | 2 | | | | | | | 1,300 |
| Phoenix No. 1 (1) | Heinisch & Berton | Below Silver City | 1861 | 20 | 3 | | | | | | | | | 6 | | 1 | 500 |
| Pioneer (1) | Sheldon & Hickok | Silver City | 1861 | 23 | 2 | | | | | | | | | 4 | | | 550 |
| Sacramento (1) | Hunt, Woodruff & Co. | Johnstown | 1861 | 18 | 5 | | | | | | | | | | | 1 | 500 |
| San Francisco | Charles Schrad | Carson River, near Dayton | 1861 | 14 | 6 | | | | | | | | | | | | 500 |
| Swansea | W. Sharon, agent | Johnstown | 1862 | 20 | 1 | | (1) | 22 | | | | | 3 | | | | 600 |

* Soon will be 1,200 per month.

† 750 tons per month; October 15, 1866.
‡ Nov 2,800 tons.

REPORT

OF

J. ROSS BROWNE

ON THE

MINERAL RESOURCES

OF THE

STATES AND TERRITORIES WEST OF THE ROCKY MOUNTAINS.

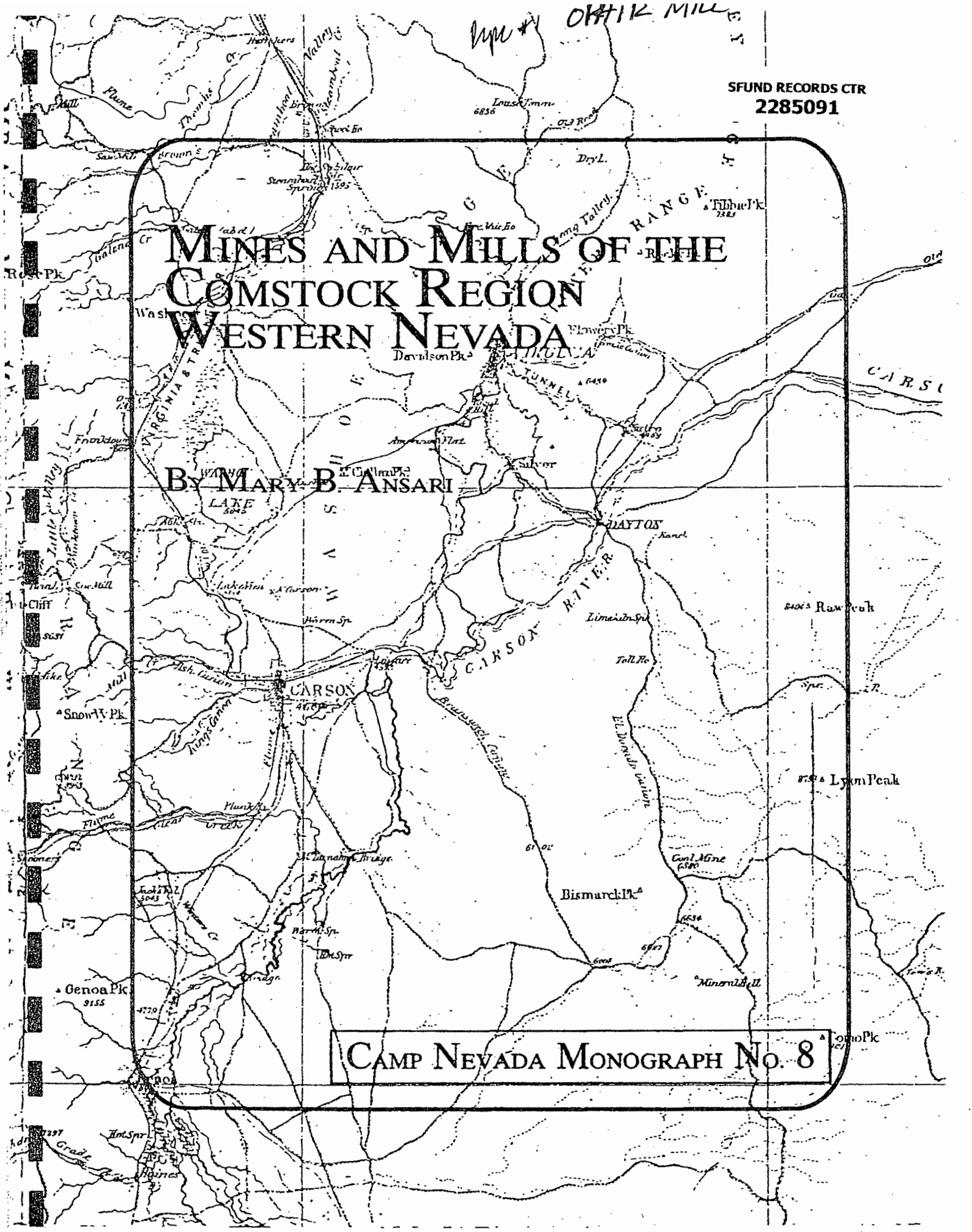
PUBLISHED BY H. H. BANCROFT & CO.,
SAN FRANCISCO, CALIFORNIA.
1868.

SFUND RECORDS CTR
2285091

MINES AND MILLS OF THE COMSTOCK REGION WESTERN NEVADA

BY MARY B. ANSARI

CAMP NEVADA MONOGRAPH No. 8



Carson River Quartz Mill: Kelly's 1862 directory reported this mill to be located above Dayton on the Carson River at a site known as Camp Woodworth. The mill's proprietors were Joseph Woodworth, William M. Stewart and John D. Winters. At that time it had 10 stamps, 4 large arastras, and 10 employees and was crushing ore at a rate of 20 tons a day from the proprietors' claim in Gold Hill, known as the Henderson claim. Kelly went on to say that with its several out buildings, the mill give the appearance of being a hamlet. One of the first mills on the Comstock, the Hastings & Woodworth Mill, was earlier located on the same site. Later the New Ophir Mill was built on the same site (Comp, 1980; Kelly, 1862, 218).

Ophir Mills: Two mills which were situated on the Carson River above Dayton and below the Island Mill. In 1865 the New Ophir Mill was listed as being owned by the Ophir Mining Co. of Virginia City, as having 24 stamps and 15 pans, burning 4 cords of wood per week, employing 15 men, and reducing 35 tons of Yellow Jacket ore a day. It was built on the site of the Carson River Quartz Mill. In 1866 it was listed as being powered by steam and water, as using 2 1/2 cords of wood a day, and as having the same number of stamps and pans and same capacity as in 1865. The 1875 map of the survey of the Virginia & El Dorado Railroad shows an Old Ophir Mill located above the New Ophir Mill. In 1868 the New Ophir Mill was owned by William Sharon's Bank of California. It operated as a tailings mill from 1873-1883, at which time it was owned by Fair and Mackay (Comp, 1980; GHN, 1865, June 5, 3:2; Map of Survey of the Virginia & El Dorado Narrow Gauge Railroad, 1875; SMR, 1866, TE, 1868, Jan. 21, 1:2).

Woodworth Mill: Shown on Wheeler's 1876-77 map as situated on the northwest bank of the Carson River approximately one mile above Dayton. The 1869-70 *State Mineralogist's Report* reported it to be a 24-stamp mill with 12 pans, and in the early 1870s it was listed as having the same number of stamps and a 48-ton capacity (SMR, 1869-70, 15; 1871-72, 100; Wheeler, 1876-77, map).

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Birdsall & Carpenter Mill: Dayton mill reported in 1865 to have 20 stamps and 10 pans, to burn 1 cord of wood a day, to reduce 30 tons a day, and to employ 10 men. In the 1866 *State Mineralogist's Report* it was listed as a water-powered mill using 2 cords of wood a day and having 30 stamps, 20 Wheeler pans, and a capacity of 55 tons a day. In the 1869-70 *State Mineralogist's Report* it was reported to have 30 stamps and 40 pans, and in the early 1870s it had been converted to a tailings mill with a capacity of 300 tons per day. The buildings were torn down in the early 1900s (Comp, 1980; GHN, 1865, June 5, 3:2; SMR, 1866, 149; 1869-70, 14; 1871-72, 100).

Sutro Mill: When Adolph Sutro, later of Sutro Tunnel fame, first settled on the Comstock, he operated this mill, which was located slightly below Dayton between the Solomon Davis and Old Dayton mills. It was erected in 1861 and was one of the early mills in the area. Kelly's 1862 directory reported it to have 10 stamps and a 12-ton-a-day capacity and to employ 10 men. At that time it was processing ore from the Gould & Curry Mine in Virginia City. The mill burned in 1863, and it was rumored that the fire had been deliberately set in order to collect the insurance. An account in the *Territorial Enterprise* in 1874 relates that Sutro never was indicted for arson in Lyon County even though there was a Grand Jury investigation at the time. One man died in the fire, and the property was

| | | | | | |
|--|---------------------------------------|---|----------------------------------|--|-----------------------------------|
| BULK 1145 | | 1863-65 | | 7. OWNER/ADMIN | |
| 8. NAME(S) OF STRUCTURE ORPHIR MILL/WOODWORTH MILL | | | | 9. OWNER'S ADDRESS | |
| 10. STATE COUNTY | N V | COUNTY NAME Lyon | CITY/VICINITY Dayton | CONG. DIST. 1 | STATE COUNTY |
| 11. SITE ADDRESS (STREET & NO) Carson River | | | | 12. EXISTING SURVEYS <input type="checkbox"/> NR <input checked="" type="checkbox"/> NHL <input type="checkbox"/> HABS <input type="checkbox"/> HAER-I <input type="checkbox"/> HAER <input type="checkbox"/> NPS <input type="checkbox"/> CONF <input type="checkbox"/> STATE <input type="checkbox"/> COUNTY <input type="checkbox"/> LOCAL <input type="checkbox"/> OTHER | |
| 13. SPECIAL FEATURES (DESCRIBE BELOW) <input type="checkbox"/> INTERIOR INTACT <input type="checkbox"/> EXTERIOR INTACT <input type="checkbox"/> ENVIRONS | | | | | |
| 14. UTM ZONE | EASTING | NORTHING | SIGN | SCALE | QUAD NAME |
| | 276100 | 4344800 | | <input type="checkbox"/> 1:24 <input type="checkbox"/> 1:62.5 <input type="checkbox"/> OTHER | |
| 15. CONDITION | 70 <input type="checkbox"/> EXCELLENT | 71 <input type="checkbox"/> GOOD | 72 <input type="checkbox"/> FAIR | 73 <input type="checkbox"/> DETERIORATED | 74 <input type="checkbox"/> RUINS |
| 75 <input type="checkbox"/> UNEXPOSED | | 76 <input type="checkbox"/> ALTERED | | 82 <input type="checkbox"/> DESTROYED | 85 <input type="checkbox"/> DEM |
| 16. INVENTORIED BY 1980 Comstock Project | | | | AFFILIATION HAER | |
| 17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC. The Ophir Mill was built on the Carson River south of Dayton on the site of the Carson River Mill. The site was purchased by the Ophir Company in 1863 for their large scale operation. The mill was operated by both steam and water power and was equipped with twenty-four stamps, working ore from the Yellow Jacket and Ophir mines. In 1868, the mill had twenty stamps and was owned by the Bank of California. In 1871, a large water wheel was installed and a major overhaul completed. The mill commenced working slimes and tailings in 1872 and continued to operate on tailings until at least 1883, at which time it was owned by Mackay & Fair. Present condition undetermined. | | | | DATE July 1980 | |
| 18. ORIGINAL USE Quartz Mill | | PRESENT USE | | ADAPTIVE USE | |
| 19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER Second Directory of the Nevada Territory, 1863, p.302. Production of Gold and Silver in the U.S., 1883, Gold Hill News, June 5, 1865 p. 3. Report of the Nevada State Mineralogist, 1866, p. 149. Territorial Enterprise, 1868, 1871, 1873. | | | | | |
| 20. URBAN AREA 50,000 POP. OR MORE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 21. HCRS REGION | 22. PUBLIC ACCESSIBILITY <input type="checkbox"/> YES, LIMITED <input type="checkbox"/> YES, UNLIMITED <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN | | 23. EDITOR INDEX | |
| 24. LOCATED IN AN HISTORIC DISTRICT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME Virginia City National Historic Landmark DISTRICT I.D. NO. | | | | | |

SOURCE: THE COMSTOCK, AN INVENTORY OF HISTORIC & NATURAL SITES

SOURCE: MINES & MILLS OF THE
COMSTOCK REGION
WESTERN NEVADA

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UNIVERSITY OF NEVADA BULLETIN

VOL. XXXVII

NOVEMBER 1, 1943

No. 4

GEOLOGY AND MINING SERIES No. 39

NEVADA'S METAL AND MINERAL
PRODUCTION
(1859-1940, Inclusive)

By BERTRAND F. COUCH, *Secretary*

and

JAY A. CARPENTER, *Director*

NEVADA STATE BUREAU OF MINES

PAGE TWENTY-ONE



PUBLICATION OF THE NEVADA STATE BUREAU OF MINES
AND THE MACKAY SCHOOL OF MINES
JAY A. CARPENTER, *Director*

— NV Metal & Mineral Production \$4.00

PROPERTIES REPORTING PRODUCTION OF \$5,000 OR MORE—Continued

| | Period | Tons | Gross yield |
|----------------------------------|-----------|---------|-------------|
| Humphries, D. W..... | 1872-1875 | 1,206 | \$18,900 |
| Independence Mining Co..... | 1887-1891 | 4,774 | 314,452 |
| Jackson Mill..... | 1898-1903 | ..... | 32,663 |
| Jan, Lewis, Jr..... | 1871 | 9,038 | 93,905 |
| Jaqua Brooks & Co..... | 1884-1887 | ..... | 15,750 |
| Kelsey Mill..... | 1872-1875 | ..... | 13,400 |
| Keystone Mill..... | 1871-1875 | ..... | 80,648 |
| King, Carrie..... | 1935 | ..... | 6,017 |
| Likens, & Rulison..... | 1871-1874 | 1,432 | 12,366 |
| Little Bonanza..... | 1883-1884 | ..... | 5,300 |
| Lyon Mining & Milling Co..... | 1873-1878 | 147,795 | 605,586 |
| Milwaukee Mine..... | 1903-1909 | 2,003 | 40,572 |
| Nevada Mining Red. & Power Co.. | 1907-1911 | 17,512 | 192,810 |
| Nevada Reduction Works..... | 1903-1907 | ..... | 138,609 |
| Oest Mining Company..... | 1887-1892 | 6,588 | 564,364 |
| Ora-Neva Dredge..... | 1940 | ..... | 127,577 |
| Pacific Mill Company..... | 1878 | ..... | 70,000 |
| Park & Douglas..... | 1871-1873 | ..... | 66,169 |
| Phillips, J. W..... | 1905-1911 | ..... | 58,757 |
| Pollard & Trimble..... | 1905-1907 | ..... | 28,328 |
| Quimby & Company..... | 1871 | 5,400 | 21,600 |
| Rodgers & Trotter..... | 1871 | 5,211 | 54,740 |
| Sacramento Mill..... | 1872 | ..... | 323,474 |
| Schlumber Bros..... | 1884 | 886 | 16,411 |
| Smith & Crowe..... | 1936-1940 | 11,573 | 74,423 |
| South Comstock Gold Mines Co.... | 1934-1940 | 66,372 | 588,174 |
| Stevenson..... | 1883 | 302 | 6,057 |
| Silver City Reduction Works..... | 1900-1902 | ..... | 18,457 |
| Three Brothers..... | 1906 | 396 | 5,503 |
| Trench Mill..... | 1871-1878 | ..... | 343,840 |
| Trimble & Hamilton..... | 1919 | ..... | 13,806 |
| Trimble, R. A..... | 1920-1922 | ..... | 38,554 |
| Union Mining & Milling Co..... | 1871-1878 | 29,500 | 333,716 |
| Western Empire Mining Co..... | 1933-1934 | 1,922 | 32,502 |
| Woodbury, J. P..... | 1905-1919 | ..... | 48,803 |
| Woodworth Mill..... | 1871-1892 | 39,138 | 876,139 |
| SPRING VALLEY— | | | |
| Spring Valley Mining Co..... | 1934 | 2,064 | 29,400 |
| PALAPOOSA— | | | |
| Rhodes-Gilbert Lease..... | 1940 | 783 | 9,586 |
| MERRINGTON (Ludwig, Mason)— | | | |
| Ambassador Gold Mines..... | 1936-1937 | 18,668 | 99,857 |
| Briestone Mining & Smelting Co.. | 1917-1920 | 400,133 | 3,570,673 |
| Douglas Mine..... | 1883-1891 | ..... | 271,804 |

DISTRICT PRODUCTION BY YEARS--Continued

| SILVER CITY—Continued | | | Year | Tons | Gross yield |
|----------------------------------|------------------------------------|--------------|------|----------------|--------------|
| Year | Tons | Gross yield | 1914 | 46,743 | \$257,506 |
| 1937 | 30,957 | \$213,905 | 1915 | 12,225 | 34,554 |
| 1938 | 59,115 | 573,528 | 1916 | 7,626 | 357,855 |
| 1939 | 16,685 | 253,214 | 1917 | 261,940 | 2,877,887 |
| 1940 | 8,048 | 246,018 | 1918 | 399,649 | 4,237,541 |
| | 673,003 | \$12,740,785 | 1919 | 61,849 | 397,823 |
| | | | 1920 | 25,073 | 133,613 |
| SPRING VALLEY | | | 1923 | | 98,834 |
| | Gold, Silver | | 1924 | 46,994 | 23,497 |
| 1934 | 2,064 | \$29,400 | 1925 | | 15,515 |
| | | | 1926 | 89,859 | 513,977 |
| | TALAPOOSA | | 1927 | 494,995 | 1,598,674 |
| | Gold, Silver, Copper | | 1928 | 495,088 | 1,627,463 |
| 1914 | 783 | \$9,586 | 1929 | 167,727 | 557,910 |
| 1940 | 197 | 2,815 | 1933 | | 31,070 |
| | 980 | \$12,401 | 1934 | 438 | 30,854 |
| | | | 1935 | 16,441 | 32,792 |
| YERINGTON (Ludwig, Mason) | | | 1936 | 6,502 | 18,393 |
| | Copper, Lead, Gold, Silver, Gypsum | | 1937 | 12,603 | 85,139 |
| 1884 | | \$88,106 | 1938 | 32,931 | 92,367 |
| 1887 | | 14,393 | 1939 | 13,938 | 29,031 |
| 1888 | | 44,324 | 1940 | 12,225 | 34,554 |
| 1891 | | 62,903 | | | |
| 1906 | 1,575 | 96,840 | | 2,649,851 | \$17,003,283 |
| 1907 | 2,407 | 121,067 | | | |
| 1912 | 249,073 | 2,152,652 | | UNKNOWN | |
| 1913 | 191,950 | 1,336,149 | 1938 | 185 | \$2,497 |

PRODUCTION OF PROPERTIES REPORTING A TOTAL
OF \$5,000 OR MORE BY DISTRICTS

| CHURCHILL— | Period | Tons | Gross yield |
|--|-----------|--------|-------------|
| Industrial Minerals and Chemical Co..... | 1936-1940 | 14,956 | \$97,135 |
| Como (Palmyra, Indian Springs)— | | | |
| Como Mines Company..... | 1919-1936 | 78,376 | 391,062 |
| Hully & Logan Mine..... | 1900-1940 | 8,076 | 76,995 |
| Nevada Deep Mines Company..... | 1911 | 1,000 | 7,655 |
| St. Joe Consolidated Mines Co..... | 1935-1939 | 1,104 | 8,095 |
| Star of the West Lease..... | 1939 | 36 | 1,118 |
| MOUND HOUSE— | | | |
| Pacific Portland Cement Co..... | 1914-1920 | ..... | 451,982 |
| PINE GROVE (Rockland, Wilson)— | | | |
| Dolores Rockland..... | 1870-1878 | 2,747 | 74,503 |
| Interstate Mining & Develop- ment Co..... | 1933-1934 | 442 | 43,037 |
| Midas Mine..... | 1870-1878 | 336 | 8,883 |

PROPERTIES REPORTING PRODUCTION OF \$5,000 OR MORE—Continued

| | Period | Tons | Gross yield |
|--------------------------------------|-----------|---------|-------------|
| Pittsburg-Dolores..... | 1915-1917 | 42,597 | \$263,071 |
| Wheeler Mine..... | 1873-1878 | 6,038 | 165,911 |
| Wilson Mine..... | 1870-1899 | 7,623 | 220,368 |
| RAMSEY— | | | |
| Hills of Home Mining Co..... | 1939-1940 | 4,246 | 240,107 |
| Hully-Logan Lease..... | 1940 | 3,220 | 97,327 |
| Lahontan Mining Company..... | 1936 | 3,371 | 19,157 |
| Ranier Investment & Mining Co..... | 1933-1934 | 224 | 16,734 |
| SILVER CITY— | | | |
| Atlanta Mill..... | 1871-1884 | ..... | 366,464 |
| Bacon..... | 1877-1878 | ..... | 331,818 |
| Beill, Jas..... | 1888 | 1,400 | 6,650 |
| Birdsall, F. & Co..... | 1871-1877 | ..... | 723,564 |
| Briggs, John..... | 1872-1873 | 2,931 | 16,271 |
| Buckeye Mine..... | 1871-1939 | 19,367 | 187,255 |
| Carson Mill..... | 1871-1873 | ..... | 696,010 |
| Comstock Milling & Mining Co..... | 1901-1922 | ..... | 107,397 |
| Comstock Tunnel Co..... | 1901-1908 | 34,628 | 59,466 |
| Dalzell Mill..... | 1904 | ..... | 226,300 |
| Darwin, George W..... | 1874-1875 | 525 | 8,712 |
| Davis Mill..... | 1898-1902 | ..... | 76,331 |
| Dayton Consolidated Mines..... | 1934-1940 | 194,070 | 2,160,819 |
| Dayton Douglas Cyanidation Co..... | 1935-1940 | ..... | 191,196 |
| Dayton Gold-Silver Mining Co..... | 1871-1875 | 30,588 | 315,001 |
| Dayton Placers..... | 1917 | ..... | 20,194 |
| Dayton Syndicate..... | 1928 | ..... | 42,890 |
| Desert Mill..... | 1871-1874 | ..... | 296,094 |
| Donovan, Wm..... | 1909-1925 | ..... | 176,767 |
| Dunson & Pollard..... | 1905 | ..... | 8,819 |
| Eureka Mill..... | 1871-1902 | ..... | 380,472 |
| Excelsior Mill..... | 1871-1891 | ..... | 228,118 |
| Fair, Mackay & Company..... | 1874 | ..... | 7,000 |
| Fitch, A. B..... | 1888 | 2,350 | 7,400 |
| Franklin & Evans..... | 1935-1938 | 4,874 | 43,307 |
| Franklin Lease..... | 1934-1940 | 5,866 | 52,933 |
| Franklin Mine..... | 1883-1891 | ..... | 26,813 |
| French & Witcher..... | 1874-1878 | ..... | 45,493 |
| Fulton-York Lease..... | 1938-1939 | 224 | 12,859 |
| Gold Canyon Cyanide Plant..... | 1900-1903 | ..... | 22,603 |
| Gold Canyon Dredging Co..... | 1920-1923 | ..... | 307,259 |
| Great Republic..... | 1891-1892 | 152 | 19,719 |
| Hamilton & Pollard..... | 1913-1914 | ..... | 18,734 |
| Hardwick & Trimble..... | 1929-1938 | ..... | 40,101 |
| Haywood Gold & Silver Mining Co..... | 1887-1891 | 4,774 | 314,452 |
| Hill, W. H. & Co..... | 1871 | 882 | 7,737 |

UNKNOWN

185 \$2,497

TOTAL

185

Tons Gross yield

14,956 \$97,135

18,376 391,062

18,076 76,995

14,000 7,655

14,104 8,095

136 1,113

451,982

2,747 74,503

442 43,037

336 8,883

d Mineral Production

| TON OF \$5,000 OR MORE—Continued | | | |
|----------------------------------|---------|-------------|--|
| Period | Tons | Gross yield | |
| 1872-1875 | 1,206 | \$18,900 | |
| 1887-1891 | 4,774 | 314,452 | |
| 1898-1903 | | 32,663 | |
| 1871 | 9,038 | 93,905 | |
| 1884-1887 | | 15,750 | |
| 1872-1875 | | 13,400 | |
| 1871-1875 | | 80,648 | |
| 1935 | | 6,017 | |
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| 1883-1884 | | 5,300 | |
| 1873-1878 | 147,795 | 605,586 | |
| 1903-1909 | 2,003 | 40,572 | |
| 1907-1911 | 17,512 | 192,810 | |
| 1903-1907 | | 138,609 | |
| 1887-1892 | 6,588 | 564,364 | |
| 1940 | | 127,577 | |
| 1878 | | 70,000 | |
| 1871-1873 | | 66,169 | |
| 1905-1911 | | 58,757 | |
| 1905-1907 | | 28,328 | |
| 1871 | 5,400 | 21,600 | |
| 1871 | 5,211 | 54,740 | |
| 1872 | | 323,474 | |
| 1884 | 886 | 16,411 | |
| 1936-1940 | 11,573 | 74,423 | |
| 1934-1940 | 66,372 | 588,174 | |
| 1883 | 302 | 6,057 | |
| 1900-1902 | | 18,457 | |
| 1906 | 396 | 5,503 | |
| 1871-1878 | | 343,840 | |
| 1919 | | 13,806 | |
| 1920-1922 | | 38,554 | |
| 1871-1878 | 29,500 | 333,716 | |
| 1933-1934 | 1,922 | 32,502 | |
| 1905-1919 | | 48,803 | |
| 1871-1892 | 39,138 | 876,139 | |
| 1934 | 2,064 | 29,400 | |
| 1940 | 783 | 9,586 | |
| 1936-1937 | 18,668 | 99,857 | |
| Co... 1917-1920 | 400,133 | 3,570,673 | |
| 1883-1891 | | 271,804 | |

Lyon County

97

| PROPERTIES REPORTING PRODUCTION OF \$5,000 OR MORE—Continued | | | |
|--|-----------|-------------|-----------|
| Period | Tons | Gross yield | |
| Empire Mining, Milling and Smelting Company..... | 1918-1919 | 11,083 | \$95,647 |
| Gypsum Quarry..... | 1933 | | 16,577 |
| Ludwig Mining Company..... | 1906-1907 | 3,035 | 184,029 |
| McConnell Mining Company..... | 1912-1913 | 14,702 | 106,785 |
| Mason Valley Mines Co..... | 1912-1929 | 1,701,794 | 7,735,881 |
| Montana-Yerington Copper Co..... | 1913-1917 | 834 | 10,744 |
| Nevada Douglas..... | 1907-1926 | 454,637 | 4,265,942 |
| Regan Bros..... | 1935-1940 | 30,991 | 122,277 |
| Sonne & Elbert..... | 1912 | 5,888 | 44,756 |
| Standard Gypsum Co..... | 1923-1929 | | 399,942 |

Samuel A. Chapin

Original
Date

For the State of Nevada

H-284

Recorder of L. 1/21 - County Nevada
12/15/1875 1/2 MILL SOLD BY W.S. HOBART
TO THE NEVADA BANK OF
SAN FRANCISCO FOR \$30,000

The adventure made the fifteenth day of December in the year of our Lord
 one thousand eight hundred and seventy-five. Between W. S. Hobbs of
 Virginia City, Store County Nevada a party of the first part and the Nevada

Barter for and to have the party of the first part, Wm. W. Smith, that the said party of the first part, for and in consideration of the sum of thirty three and Dallas Dallas Gold Coin of the United States of America to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged has granted bargained sold conveyed remised released and forever quit claimed and by these presents does grant bargain sell convey remise release and forever quit claim unto the said party of the second part and to its successors and assigns all the right title interest estate claim and demand both at law and in equity and as well in possession as in expectancy of the said party of the first part of in and to all that certain lot piece or parcel of land situated lying and being in the County of Lyon State of Nevada and bounded and particularly described as follows to wit: All of an undivided one half of that certain Mill site, with the Quartz Mill and machinery therein and the Water privilege heretofore enjoyed there with formerly owned by the Ophir Silver Mining Company and by said Company heretofore conveyed to the party of the first part by Deed now of Record in the office of the County Recorder of Lyon County Nevada which said Mill site is situated on the Carson River in said County of Lyon about 1 1/4 miles above the town of Dayton and containing 529 Acres more or less said Quartz Mill was formerly known as the Woodworth Mill Together with all and singular the tenements hereditaments and appurtenances thereunto belonging or in anywise appertaining and the rents issues and profits thereof To have and to hold all and singular the said premises together with the appurtenances unto the said party of the second part its successors and assigns forever
In Witness whereof the said party of the first part has hereunto set his hand and seal the day and year first above written signed sealed and delivered in Presence of _____ W. S. Hobart

State of Nevada) ss
County of Lyon) On this thirteenth day of December 1875 one thousand eight hundred and seventy five personally appeared before me N. V. Day a Notary Public in and for the said County of Lyon N. V. Hobart whose name is subscribed to the annexed instrument as a party thereto to personally known to me to be the same person described in and who executed the said annexed instrument as a party thereto and he duly acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned
In Witness whereof I have hereunto set my hand and affixed my official seal the day and year in this Certificate first above written
R. V. Day Notary Public

Recorded at request of Wells Fargo & Co. December 26th 1875 at 2 min past 7 A.M.
G. H. Gilman
Recorder of Lyon County Nevada

Notary Public
J. D. Gilman
Recorder of Lyon County, Nevada
December 23d A.D. 1875

12/22/1875

This instrument made the twenty second day of December in the year of our Lord one thousand eight hundred and seventy five Between James G. Fair of the City of Virginia Storey County Nevada of the first part and Pacific Mill and Mining Company a corporation of the State of California the party of the second part Witnesseth that the said party of the first part for and in consideration of the sum of One Dollar gold coin of the United States of America to him in hand paid by the said party of the second part the receipt whereof is hereby acknowledged has remise released and forever quit claimed and by these presents does remise release and forever quit claim unto the said party of the second part and to its successors heirs and assigns all the undivided one half part of that certain tract of land lying and being situate in Lyon County State of Nevada and more particularly described as The South West quarter of the South West quarter of Section numbered twenty six (26) in Township numbered section (16) North of Range numbered twenty one (21) East of Monie Pacific Base and Meridian Together with all and singular the tenements hereditaments and appurtenances thereto belonging or in anywise appertaining and the reversion and reversionary remainder and remainder unto issues and profits thereof and also all the estate right title interest property possession claim and demand what soever as well in law as in equity of the said party of the first part of in or to the said premises and every part and parcel thereof with the appurtenances to have and to hold all and singular the said premises together with the appurtenances unto the said party of the second part and to its successors heirs and assigns forever In Witness whereof the said party of the first part has hereunto set his hand and seal the day and year first above written

Signed sealed and delivered in the presence of

James G. Fair

Seal

State of Nevada

County of Storey. On this twenty second day of December A.D. one thousand eight hundred and seventy five personally appeared before me R. V. Day a Notary Public and for the said County of Storey of J. G. Fair whose name is subscribed to the annexed instrument as a party thereto personally known to me to be the same person described in and who executed the said annexed instrument as a party thereto and he duly acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned

This instrument made the Twenty second day of December A.D. one thousand
 eight hundred and seventy five before me personally appeared James I. Shaw
 of Virginia Storey County Nevada a party of the first part and the Board of Supervisors
 of San Francisco a corporation of the State of California the party of the second
 part. Witnesseth That the said party of the first part for and in consideration of
 the sum of One Dollar gold coin of the United States of America to him hereinafter
 paid by the said party of the second part the receipt whereof is hereby acknowledged
 has remised released and forever quitclaimed and by these presents does release
 release and forever quitclaim unto the said party of the second part and to its
 successors heirs and assigns all the undivided one half part of that certain two
 of land lying and being situated in Lyon County State of Nevada and more particu-
 larly described as The South West quarter of the North West quarter of section num-
 bered twenty six (26) in Township numbered sixteen (16) North of Range num-
 bered twenty one (21) East of Monte Diablo Base and Meridian. Together with all
 and singular the tenements hereditaments and appurtenances thereunto belonging
 or in anywise appertaining and the accretions and accessions remain to be and remain-
 ing to be made and forth thereof and also all the estate right title interest
 property possession claim and demand whatever as well in law as in equity
 of the said party of the first part of in or to the said premises and every part and parcel
 thereof with the appurtenances. To have and to hold all and singular the said
 premises together with the appurtenances unto the said party of the second part
 its heirs assigns and assigns forever.
 In Witness Whereof the said party of the first part has hereunto set his hand
 and seal the day and year first above written
 Signed sealed and delivered in the
 Presence of

12/22/1875

James I. Shaw

State of Nevada

County of Storey On this Twenty second day of December A.D. one thousand
 eight hundred and seventy five personally appeared before me R. N. Dey a Notary
 Public in and for the said County of Storey James I. Shaw whose name is
 subscribed to the annexed instrument as a party thereto personally known
 to me to be the same person described in and who executed the said annexed
 instrument as a party thereto and he duly acknowledged to me that he executed
 the same freely and voluntarily and for the uses and purposes therein mentioned.
 In Witness Whereof I have hereunto set my hand and affixed my official
 seal the day and year in this certificate first above written



R. N. Dey

Notary Public

Record of Deeds of Wells Fargo & Co. Nevada Nevada State
J. S. Gilman
Recorder of Lyon County Nevada

1875

This indenture, made the second day of December in the year of our Lord one thousand eight hundred and seventy five. Between Charles O. Damon of Dayton Nevada of the first part & Michael R. Martin of Virginia Nevada the party of the second part, Witnesseth, That the said party of the first part, for and in consideration of the sum of One Thousand Dollars of the United States of America, to him in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has remised, released and forever quit claimed, and by these presents does remise, release, and forever quit claim unto the said party of the second part, and to his heirs and assigns, forever all that certain undivided 3/10 of that Ditch in County of Esmeralda & Lyon & State of Nevada and bounded and particularly described as follows, to wit: The Three Tenth undivided interest of said Damon in & to the Gold Hill Ditch in Masons Valley - part of said Ditch being in Esmeralda & part in Lyon County - Commencing at a point on the westerly side of Walker River & runs down in to Lyon County & was made by the Gold Hill Ditch Company about 14 years ago, & was divided in to Ten Shares; & this is to convey the undivided 3/10 interest of said Damon in said Ditch & the water flowing through the same & all his interest & claim in & to said Ditch. Together with all and singular the tenements, hereditaments and appurtenances therunto belonging, or in any wise appertaining, and the reversion, reversions, remainder, remainders, rents, issues and profits thereof; and also all the estate, right, title, interest, property, possession, claim and demand whatsoever, as well in law as in equity, of the said party of the first part, of, in or to the said premises, and every part of parcel thereof, with the appurtenances. Do Have and to Hold, all and singular, the said premises, together with the appurtenances, unto the said party of the second part, and to his heirs and assigns forever.

In Witness Whereof, the said party of the first part, has hereunto set his hand and seal the day and year first above written.
Signed Sealed & Delivered in presence of } Charles O. Damon

| | | | | | | |
|----------------------------|-------------------------|-------------------|-----------------------|-----------------------|------------------------|----------------|
| 1. NAME OF STRUCTURE | 2. DATE OF CONSTRUCTION | 3. DATE OF REPAIR | 4. DATE OF ALTERATION | 5. DATE OF DEMOLITION | 6. DATE OF ACQUISITION | 7. OWNER/ADMIN |
| ORPHIR MILL/WOODWORTH MILL | 1863-65 | | | | | |

| | |
|----------------------------|--------------------|
| 8. NAME(S) OF STRUCTURE | 9. OWNER'S ADDRESS |
| ORPHIR MILL/WOODWORTH MILL | |

| | | | | | | | |
|---------------------|-----------------|-------------------|-----------------|---------------------|-----------------|-------------------|-----------------|
| 10. STATE COUNTY | 11. COUNTY NAME | 12. CITY/VICINITY | 13. CONG. DIST. | 14. STATE COUNTY | 15. COUNTY NAME | 16. CITY/VICINITY | 17. CONG. DIST. |
| NV | Lyon | Dayton | 1 | | | | |

| | | |
|---------------------------------|---|--|
| 11. SITE ADDRESS (STREET & NO.) | 12. EXISTING SURVEYS | 13. SPECIAL FEATURES (DESCRIBE BELOW) |
| Carson River | <input type="checkbox"/> NR <input checked="" type="checkbox"/> NHL <input type="checkbox"/> HABS <input type="checkbox"/> HAER-I <input type="checkbox"/> HAER <input type="checkbox"/> NPS <input type="checkbox"/> CL6 <input type="checkbox"/> CONF <input type="checkbox"/> STATE <input type="checkbox"/> COUNTY <input type="checkbox"/> LOCAL <input type="checkbox"/> OTHER | <input type="checkbox"/> INTERIOR INTACT <input type="checkbox"/> EXTERIOR INTACT <input type="checkbox"/> ENVIRONS INTACT |

| | | | | | |
|--------------|---------|----------|------|---|-----------|
| 14. UTM ZONE | EASTING | NORTHING | SIGN | SCALE | QUAD NAME |
| | 276100 | 4344800 | | <input type="checkbox"/> 1:24 <input type="checkbox"/> 1:62.5 <input type="checkbox"/> OTHER | |
| UTM ZONE | EASTING | NORTHING | SIGN | SCALE | QUAD NAME |
| | | | | <input type="checkbox"/> 1:24 <input type="checkbox"/> 1:62.5 <input type="checkbox"/> OTHER | |

| | | | | | | | | | |
|---------------|---------------------------------------|----------------------------------|----------------------------------|--|-----------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|--|
| 15. CONDITION | 70 <input type="checkbox"/> EXCELLENT | 71 <input type="checkbox"/> GOOD | 72 <input type="checkbox"/> FAIR | 73 <input type="checkbox"/> DETERIORATED | 74 <input type="checkbox"/> RUINS | 75 <input type="checkbox"/> UNEXPOSED | 76 <input type="checkbox"/> ALTERED | 82 <input type="checkbox"/> DESTROYED | 85 <input type="checkbox"/> DEMOLISHED |
|---------------|---------------------------------------|----------------------------------|----------------------------------|--|-----------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|--|

| | | |
|-----------------------|-------------|-----------|
| 16. INVENTORIED BY | AFFILIATION | DATE |
| 1980 Comstock Project | HAER | July 1980 |

17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC.

The Ophir Mill was built on the Carson River south of Dayton on the site of the Carson River Mill. The site was purchased by the Ophir Company in 1863 for their large scale operation. The mill was operated by both steam and water power and was equipped with twenty-four stamps, working ore from the Yellow Jacket and Ophir mines. In 1868, the mill had twenty stamps and was owned by the Bank of California. In 1871, a large water wheel was installed and a major overhaul completed. The mill commenced working slimes and tailings in 1873 and continued to operate on tailings until at least 1883, at which time it was owned by Mackay & Fair. Present condition undetermined.

(CONT OVER)

| | | |
|------------------|-------------|--------------|
| 18. ORIGINAL USE | PRESENT USE | ADAPTIVE USE |
| Quartz Mill | | |

| | |
|---|--|
| 19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER | |
| Second Directory of the Nevada Territory, 1863, p. 302. Production of Gold and Silver in the U.S., 1883, p. 538. Gold Hill News, June 5, 1865 p. 3. Report of the Nevada State Mineralogist, 1866, p. 149. Territorial Enterprise, 1868, 1871, 1873. | |

(CONT OVER)

| | | | |
|---|-----------------|---|------------|
| 20. URBAN AREA 50,000 POP. OR MORE? | 21. HCRS REGION | 22. PUBLIC ACCESSIBILITY | 23. EDITOR |
| <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> YES, LIMITED <input type="checkbox"/> YES, UNLIMITED <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN | INDEXER |

| | | |
|---|--|-------------------|
| 24. LOCATED IN AN HISTORIC DISTRICT? | NAME | DISTRICT I.D. NO. |
| <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | Virginia City National Historic Landmark | |

| NAME. | Motive Power. | Cords Wood Day | No. of Stamps. | Weight of Stamps. | No. of Pans. | Nature of Pans. | Crushing Capacity per Day Tons. | REMARKS. |
|----------------|---------------|----------------------|-------------------|----------------------|-----------------|-------------------------|--|------------|
| STOREY COUNTY. | | | | | | | | |
| Atlas. | steam | 4 $\frac{1}{2}$ | 15 | 600 | 8 | Hepburn. | 25 | |
| Atwood. | " | 4 $\frac{1}{2}$ | 16 | | 26-2 | Knox, Wheeler. | 20 | |
| Bay State. | " | 6 | 23 | | 14 | Wheeler. | 35 | |
| Bower's. | " | 4 | 20 | 10-600 10-700 | 30 | Knox. | 25 | |
| Central. | " | 8 | 13 | | 4 | Hepburn. | 12 | |
| Crown Point. | " | 5 | 8 | 500 | 8 | Knox. | 8 | |
| Comet. | " | 4 $\frac{1}{2}$ | 16 | | 28 | Plain. | 20 | |
| Douglas. | " | 4 | 10 | 650 | 8 | Hepburn. | 16 | |
| Eclipse. | " | 4 | 15 | | 29 | Wheeler. | 25 | |
| Empire, No. 1. | " | 5 $\frac{1}{2}$ | 21 | 650 | 12 | Knox, Hepburn. | 30 | |
| Empire, No. 2. | " | 8 | 16 | 650 | 20-2-2 | Wheeler. | 32 | |
| Empire State. | " | 5 | 15 | | 24 | Knox, Wheeler, Hepburn. | 15 | |
| Gold Hill. | " | 3 | 14 | 8-600 8-750 | 39-3 | Knox. | 17 | |
| Granite. | " | 20 | 80 | | 24 | Hepburn, Varney. | 100 | Refitting. |
| Gould & Curry. | " | 3 $\frac{1}{2}$ | 8 | 750 | 74 | Knox. | 12 | |
| Hoosier State. | " | 6 | 44 | 600 | 10 | Knox. | 30 | |
| Imperial. | " | 5 $\frac{1}{2}$ | 20 | | 2-6 | Wheeler. | 15 | |
| Land's. | " | 4 | 12 | | 30 | Knox, Wheeler. | 18 | |
| Mariposa. | " | 5 | 9 $\frac{1}{2}$ | | 12 | Wheeler. | 20 | |
| Marysville. | " | 6 | 22 | | 15 | Wheeler. | 50 | |
| Ogden. | " | 8 | 30 | 650 | 18 | Knox. | 26 | |
| Pacific. | " | 3 $\frac{1}{2}$ | 16 | 700 | 12 | Hepburn. | 30 | |
| Petaluma. | " | 5 $\frac{1}{2}$ | 20 | 650 | 13-8 | Knox, Hepburn. | 40 | |
| Piute. | " | 8 | 25 | 650 | 5 | Varney. | 12 | |
| Rhode Island. | " | 4 | 10 | | 56 | Knox. | 28 | |
| Rigby's. | " | 5 | 16 | 750 | 8 | Tubs, Wheeler, Hepburn. | 25 | |
| Rogers'. | " | 3 $\frac{1}{2}$ | 8 | | 10 | Knox. | 10 | |
| Sapphire. | " | 5 | 16 | | | | 26 | |
| Simcoe. | " | 5 | 16 | | | | | |
| Stevenson's. | " | 2 $\frac{1}{2}$ | 8 | | | | | |
| Succor. | " | 6 | 20 | | | | | |

NEVADA STATE
MINEROLOGIST
BIENNIAL
REPORT
1866

| | | | | | | | | |
|-----------------------|--------------|-----------------|----|--------------|------|---------------------|----|---|
| Summit. | " | 6 | 20 | 625 | 11-1 | Wheeler, Varney. | 35 | |
| Union. | " | 2 $\frac{1}{2}$ | 14 | 10-650 4-500 | 14 | Hepburn. | 14 | |
| Winfield. | " | 5 | 18 | | 8 | Hepburn. | 30 | |
| LYON COUNTY. | | | | | | | | |
| Birdsall & Carpenter. | water | 2 | 30 | 650 | 20 | Wheeler. | 55 | |
| Bacon. | steam | 6 | 20 | 650 | 17 | Wheeler. | 30 | |
| Bartolo. | " | 3 | 8 | 550 | 8 | Knox. | 9 | |
| Cole & Co. | " | 3 | 5 | 480 | 4 | Wheeler. | 3 | |
| Devil's Gate. | " | 5 | 8 | 900 | 10 | Hepburn. | 14 | |
| Dancy. | " | 6 | 15 | 550 | 15 | Wooden Tubs. | 20 | |
| Dayton, No. 1. | water | 1 | 20 | 500 | 6 | Wheeler. | 20 | |
| Dayton, No. 2. | steam | 6 | 15 | 800 | 8 | Varney. | 15 | |
| Eagle. | water | | 5 | 400 | 2 | Knox. | 15 | |
| Eastern Slope. | steam | 5 $\frac{1}{2}$ | 16 | 880 | 6 | Hepburn. | 20 | |
| Excelsior. | " | 3 | 10 | 650 | 18 | Knox. | 18 | |
| Eureka. | water | | 20 | 650 | 8 | Wheeler. | 22 | |
| Franklin. | " | 4 | 10 | 600 | 8 | Knox. | 12 | |
| Golden Eagle. | steam | 3 $\frac{1}{2}$ | 10 | 850 | 25 | Tubs. | 13 | |
| Illinois. | " | 5 | 20 | 400 | 5 | Hepburn. | 20 | |
| Island. | " | 2 | 19 | 650 | 11 | Tubs. | 14 | |
| Lindauer & Co. | st'm & water | 2 $\frac{1}{2}$ | 15 | 480 | 10 | Wheeler. | 20 | Dismantled. |
| Metallurgical Works. | steam | 5 | 15 | 700 | 6 | Wheeler. | 16 | |
| Monitor. | water | | 5 | 450 | 2 | Wheeler. | 3 | |
| New York & Nevada. | steam | 5 $\frac{1}{2}$ | 20 | 550 | 17 | Hepburn. | 25 | |
| Ophir. | st'm & water | 2 $\frac{1}{2}$ | 24 | 600 | 15 | Hepburn. | 35 | |
| Pioneer. | steam | 6 | 15 | 700 | 15 | Tubs and Wheeler. | 20 | |
| Phoenix, No. 1. | " | 6 | 15 | 650 | 8 | Tubs and Wheeler. | 19 | One of these Mills destroyed by fire during 1866. |
| Phoenix, No. 2. | " | 7 | 20 | 534 | 34 | Tubs. | 28 | |
| Palmyra. | " | 4 $\frac{1}{2}$ | 10 | 650 | 12 | Tubs. | 15 | |
| Rock Point. | st'm & water | 2 $\frac{1}{2}$ | 56 | 550 | 50 | Tubs and 6 Hepburn. | 60 | |
| Sparrow & Trench. | steam | 6 | 20 | 600 | 19 | | 25 | |
| Sherman & Co. | water | | 5 | 400 | 2 | | 4 | |
| Swansca. | steam | 5 | 14 | 900 | 22 | Tubs. | 20 | |
| Smith, D. L. | water | | 5 | 450 | 4 | Tubs. | 4 | |
| Sacramento. | steam | 5 | 12 | 750 | 12 | Tubs. | 18 | |
| San Francisco. | st'm & water | 3 | 10 | 650 | 7 | Tubs and Wheeler. | 14 | |
| Weston & Co. | steam | 4 | 15 | 550 | 9 | Wheeler. | 14 | |
| Weston & Co. | water | | 10 | 450 | 8 | Tubs. | 11 | |

SFUND RECORDS CTR
2285091

MINES AND MILLS OF THE COMSTOCK REGION WESTERN NEVADA

BY MARY B. ANSARI

CAMP NEVADA MONOGRAPH No. 8

Carson River Quartz Mill: Kelly's 1862 directory reported this mill to be located above Dayton on the Carson River at a site known as Camp Woodworth. The mill's proprietors were Joseph Woodworth, William M. Stewart and John D. Winters. At that time it had 10 stamps, 4 large arastras, and 10 employees and was crushing ore at a rate of 20 tons a day from the proprietors' claim in Gold Hill, known as the Henderson claim. Kelly went on to say that with its several out buildings, the mill gave the appearance of being a hamlet. One of the first mills on the Comstock, the Hastings & Woodworth Mill, was earlier located on the same site. Later the New Ophir Mill was built on the same site (Comp, 1980; Kelly, 1862, 218).

Ophir Mills: Two mills which were situated on the Carson River above Dayton and below the Island Mill. In 1865 the New Ophir Mill was listed as being owned by the Ophir Mining Co. of Virginia City, as having 24 stamps and 15 pans, burning 4 cords of wood per week, employing 15 men, and reducing 35 tons of Yellow Jacket ore a day. It was built on the site of the Carson River Quartz Mill. In 1866 it was listed as being powered by steam and water, as using 2 1/2 cords of wood a day, and as having the same number of stamps and pans and same capacity as in 1865. The 1875 map of the survey of the Virginia & El Dorado Railroad shows an Old Ophir Mill located above the New Ophir Mill. In 1868 the New Ophir Mill was owned by William Sharon's Bank of California. It operated as a tailings mill from 1873-1883, at which time it was owned by Fair and Mackay (Comp, 1980; GHN, 1865, June 5, 3:2; Map of Survey of the Virginia & El Dorado Narrow Gauge Railroad, 1875; SMR, 1866, TE, 1868, Jan. 21, 1:2).

Woodworth Mill: Shown on Wheeler's 1876-77 map as situated on the northwest bank of the Carson River approximately one mile above Dayton. The 1869-70 *State Mineralogist's Report* reported it to be a 24-stamp mill with 12 pans, and in the early 1870s it was listed as having the same number of stamps and a 48-ton capacity (SMR, 1869-70, 15; 1871-72, 100; Wheeler, 1876-77, map).

Sprouls Mill: Small Carson River mill which was located above Dayton between the Barton & Co. and Carson River Quartz mills. In Kelly's 1862 directory it was listed as Sproul & Co.'s Excelsior Mill and reported to have 10 stamps and 20 Hungarian pans, to employ 15 men, and to process ore from the proprietors' Gold Hill claim. The proprietors were J.R. Sproul, C.C. Goodwin, Levi Hite, and J.R. Brett. The mill and dam cost approximately \$5,000 (Bancroft, 1862, map; Kelly, 1862, 218).

Birdsall & Carpenter Mill: Dayton mill reported in 1865 to have 20 stamps and 10 pans, to burn 1 cord of wood a day, to reduce 30 tons a day, and to employ 10 men. In the 1866 *State Mineralogist's Report* it was listed as a water-powered mill using 2 cords of wood a day and having 30 stamps, 20 Wheeler pans, and a capacity of 55 tons a day. In the 1869-70 *State Mineralogist's Report* it was reported to have 30 stamps and 40 pans, and in the early 1870s it had been converted to a tailings mill with a capacity of 300 tons per day. The buildings were torn down in the early 1900s (Comp, 1980; GHN, 1865, June 5, 3:2; SMR, 1866, 149; 1869-70, 14; 1871-72, 100).

Sutro Mill: When Adolph Sutro, later of Sutro Tunnel fame, first settled on the Comstock, he operated this mill, which was located slightly below Dayton between the Solomon Davis and Old Dayton mills. It was erected in 1861 and was one of the early mills in the area. Kelly's 1862 directory reported it to have 10 stamps and a 12-ton-a-day capacity and to employ 10 men. At that time it was processing ore from the Gould & Curry Mine in Virginia City. The mill burned in 1863, and it was rumored that the fire had been deliberately set in order to collect the insurance. An account in the *Territorial Enterprise* in 1874 relates that Sutro never was indicted for arson in Lyon County even though there was a Grand Jury investigation at the time. One man died in the fire, and the property was

There are 20 quartz mills in this county, which have been in constant operation during the year, and employed in working ores from the Oquirrh ridge. In many instances, some of these number work batteries and stampmills taken from the water-rail canal Carson River, Nevada, making the economy of cost a number of these mills has been short. These mills are all located in and about Dayton, on Oquirrh river, and on Upper Carson river. There are some of the latest and most complete mills in this county, embracing all of the modern improvements in use, among which are the following: The Imperial Silver Mining Company's mill, situated north of Dayton, on Carson river; also, Carpenter & Birdsell's mill, situated immediately south of Dayton, propelled by water, consisting of 20 stamps, with all the modern improvements in the way of pans, etc., being decidedly the best power and mill seat in the county; also, the Joseph French mill in Silver City, and many other mills, will compare with any in the State, etc. A list hereto attached will give the motive power, number of stamps, capacity, value, names of owners, etc., of each mill:

A LIST OF ALL THE MILLS IN THE COUNTY.

Birdsell & Carpenter, Birdsell & Carpenter proprietors; Carson river south of Dayton; assessed value, \$120,000; water power; 20 stamps; 10 pans.

Dayton mills; Winters, Robinson & Co.; Carson river south of Dayton; assessed value, \$60,000; steam power; 15 stamps; 10 pans.

Dayton mills; Winters, Robinson & Co.; Carson river south of Dayton; assessed value, \$115,000; water power; 15 stamps; 10 pans.

Ophir; Bank of California; Carson river south of Dayton; assessed value, \$60,000; water power; 20 stamps; 8 pans.

Franklin; Bank of California; Carson river south of Dayton; assessed value, \$45,000; water power; 10 stamps; 5 pans.

Island; Bank of California; Carson river south of Dayton; assessed value, \$25,000; water power; 10 stamps; 6 pans.

Hurd's; Hurd, Ball & Co.; Carson river south of Dayton; assessed value, \$40,000; water power; 10 stamps; 8 pans.

Daney; Bank of California; Carson river south of Dayton; assessed value, \$40,000; steam power; 15 stamps; 8 pans.

Mineral Rapids; John Rule & Co.; Carson river; Dayton; assessed value, \$18,000; steam power; 10 stamps; 16 pans.

Illinois; Bank of California; Carson river; Dayton; assessed value, \$20,000; steam power; 10 stamps; 3 pans.

Rock Point; Imperial S. M. Co.; Carson river north of Dayton; assessed value, \$200,000; steam power; 50 stamps; 22 pans.

Keystone; McLinn & Co.; Gold Canyon west of Dayton; assessed value, \$3,000; steam power; 5 stamps; 6 pans.

Weston's; Weston & Co.; Gold Canyon west of Dayton; assessed value, \$29,000; steam power; 10 stamps; 5 pans.

Weston's; Weston & Co.; Gold Canyon west of Dayton; assessed value, \$1,000; water power; 10 stamps; 6 pans.

Atlantic; Koussani & Co.; Gold Canyon west of Dayton; assessed value, \$5,000; steam power; 15 stamps; 4 pans.

Sacramento; J. W. L. Hunt & Co.; Gold Canyon west of Dayton; assessed value, \$20,000; steam power; 12 stamps; 3 pans.

Excelsior; John Briggs; Gold Canyon west of Dayton; assessed value, \$18,000; steam power; 10 stamps; 10 pans.

Wanawana; Bank of California; Gold Canyon west of Dayton; assessed value, \$20,000; steam power; 18 stamps; 12 pans.

Phoenix No. 1; Bank of California; Gold Canyon west of Dayton; assessed value, \$35,000; steam power; 12 stamps; 6 pans.

Eastern Slope; Simpson & Co.; Gold Canyon west of Dayton; assessed value, \$10,000; steam power; 15 stamps; 10 pans.

Metallurgical Works; New York Co.; Gold Canyon west of Dayton; assessed value, \$4,000; steam power; 15 stamps; 5 pans.

Total number of
 Total number of
 Total number of
 Total number of
 Total number of
 Total number of
 Hay, tons
 Grain, bushels
 Wheat, bushels
 Barley, bushels
 Oats, bushels
 Indian corn, bushels
 Potatoes, bushels
 Respectfully
 Coun

1721/1868
 H. H. Mark

Hon. S. H. Mark

Sir: Since the date
 this county has been
 by the creation out
 Notwithstanding that
 resources have made
 past year, owing to
 means in the central
 county. Many new
 and large and valuable
 opened.
 Our assessment for
 \$1,000,000 22, being
 of last year, the tax
 levy being \$2 90, in
 cents on each \$100.
 The tax derived from
 as follows:

| Quarter ending | No. Taxes |
|----------------|-----------|
| Dec. 31, 1867 | 2,025 |
| March 31, 1867 | 1,514 |
| June 30, 1867 | 1,767 |
| Sept. 30, 1867 | 1,576 |

This tax creates an
 unequal and unjust
 section, where the ore
 and the western part
 tion the law was in
 Here is frequently a
 cent tax upon the
 some instances taxes
 are an actual loss.
 Upon an estimate of
 upon ores for the last
 find there were reduced
 extracting and reduced
 is \$50 per ton in gold
 \$78,801, deducted from
 51, leaves \$62,243 51 and
 which, reduced to cur
 dollar, is \$62,991 34, u
 of \$4,106 90 in curre
 cent upon the true va
 mines. This is very o
 upon the miner, and
 will tend greatly to di
 but the most productiv
 be able to pay it.
 I have collected \$725
 the year, and will prob
 I send you inclosed a
 quarries in the co
 best sources at my co
 and superintendents
 and in most
 return the blacks left
 There are seven stoa
 with a capacity of from
 per diem. The value
 to \$80 per M. at the mill
 An excellent quality
 of \$15 per M.

I estimate there were
 land cultivated this se

BIENNIAL REPORT OF THE STATE MINEROLOGIST

LYON NEVADA COUNTY—1875.

1875-1876

| NAME OF MINE OR OWNER. | FIRST QUARTER. | | | SECOND QUARTER. | | |
|----------------------------------|----------------|-----------|--------------|-----------------|-----------|--------------|
| | Tons | Pounds... | Gross value. | Tons | Pounds... | Gross value. |
| Cromer | | | | 100 | | \$800 00 |
| Dayton G. & S. Mining Company. | 1,200 | | \$20,599 83 | | | |
| Santiago | 300 | | 3,300 00 | | | |
| Silver City Mining Company | | | | | | |
| <i>Tailings.</i> | | | | | | |
| Dorwin, G. W | | | | 82 | | 1,640 00 |
| Excelsior Mill | 73 | | 1,360 72 | 440 | | 2,819 23 |
| French & Co. | | | | 40 | | 308 00 |
| Humphrey, D. W | | | | 100 | | 1,650 00 |
| Hearne, M. A. | | | | 88 | | 785 00 |
| Hayes, Louis | 30 | | 288 75 | 38 | | 132 20 |
| Keystone Mill | 200 | | 1,873 61 | 200 | | 1,800 00 |
| Lyon M. & M. Co | 11,708 | | 40,460 52 | 14,260 | | 45,313 62 |
| Eureka Mill | | | | | | |
| Kelsey Mill | | | | | | |
| Woodworth Mill | | | | | | |
| Totals | 13,511 | | \$67,883 43 | 15,548 | | \$55,248 05 |

| THIRD QUARTER. | | | FOURTH QUARTER. | | | TOTALS. | | |
|----------------|----------|--------------|-----------------|----------|--------------|-----------|----------|--------------|
| Tons..... | Pounds.. | Gross value. | Tons..... | Pounds.. | Gross value. | Tons..... | Pounds.. | Gross value. |
| | | | | | | 100 | ..... | \$800 00 |
| | | | | | | 1,200 | ..... | 20,599 83 |
| | | | | | | 300 | ..... | 3,300 00 |
| | | | 46 | ..... | \$1,426 00 | 46 | ..... | 1,426 00 |
| 116 | | \$1,508 00 | 170 | ..... | 2,550 00 | 368 | ..... | 5,698 00 |
| 984 | | 4,318 22 | 300 | ..... | 1,263 00 | 1,797 | ..... | 9,761 17 |
| 201 | | 3,216 00 | 150 | ..... | 1,200 00 | 391 | ..... | 4,724 00 |
| 300 | | 4,200 00 | 50 | ..... | 750 00 | 450 | ..... | 6,600 00 |
| 35 | | 469 00 | ..... | ..... | ..... | 123 | ..... | 1,254 00 |
| 40 | | 160 00 | 13 | ..... | 135 00 | 121 | ..... | 715 95 |
| | | | | | | 400 | ..... | 3,673 61 |
| 11,049 | | 40,897 83 | 12,491 | ..... | 47,245 68 | 49,508 | ..... | 173,917 65 |
| 2,500 | | 36,000 00 | 1,500 | ..... | 21,215 16 | 4,000 | ..... | 57,215 16 |
| 1,000 | | 4,000 00 | ..... | ..... | ..... | 1,000 | ..... | 4,000 00 |
| 4,000 | | 40,000 00 | 4,000 | ..... | 40,000 00 | 8,000 | ..... | 80,000 00 |
| 20,225 | | \$134,769 05 | 18,810 | ..... | \$115,784 84 | 67,804 | ..... | \$373,685 37 |

WOODWORTH
NO LISTING FOR 1876 BUT
YES FOR 1877

BIENNIAL REPORT OF THE STATE MINEROLOGIST

LYON COUNTY—1877. NEVADA 1877-1878

| Name of Mine or Owner. | FIRST QUARTER. | | | SECOND QUARTER. | | |
|---------------------------|----------------|---------|--------------|-----------------|---------|--------------|
| | Tons. | Pounds. | Gross Value. | Tons. | Pounds. | Gross Value. |
| <i>Tailings.</i> | | | | | | |
| / Buckeye..... | 754 | | \$ 4,966 21 | | | |
| / William McLaughlin..... | | | | 61 | | \$ 2,501 00 |
| / Atlanta Mill..... | | | | | | |
| / Bacon Mill..... | | | | | | |
| / Excelsior Mill..... | | | | | | |
| / Lyon M. and M. Co..... | | | | | | |
| / French Mill..... | | | | | | |
| / Union M. and M. Co..... | | | | | | |
| / Woodworth Mill..... | | | | | | |
| Others..... | 1,657 | 1,000 | 21,651 60 | 20,525 | | 135,084 84 |
| Totals..... | 2,411 | 1,000 | \$26,617 81 | 20,586 | | \$137,585 84 |

NYE

| Name of Mine or Owner. | FIRST QUARTER. | | | SECOND QUARTER. | | |
|--------------------------|----------------|---------|--------------|-----------------|---------|--------------|
| | Tons. | Pounds. | Gross Value. | Tons. | Pounds. | Gross Value. |
| Adriatic..... | | 1,457 | \$ 53 82 | | | |
| Dominion..... | 5 | 1,109 | 1,174 26 | | | |
| Gila..... | 1 | 260 | 108 29 | | | |
| Gladiator..... | 3 | 1,146 | 535 14 | | | |
| Highbridge..... | 4 | 978 | 1,080 03 | | | |
| Illinois..... | 88 | | 4,400 00 | 185 | 671 | \$ 25,842 83 |
| Last Chance..... | 77 | | 2,310 00 | | | |
| McCleary, A. M..... | 5 | 182 | 287 91 | | | |
| Pasqual, Felix..... | 1 | 1,474 | 678 29 | | | |
| Purcell, M..... | | 529 | 52 98 | | | |
| Squire, S. H..... | 1 | 200 | 349 81 | | | |
| Tybo Con..... | 5,705 | | 174,081 43 | | | |
| West Side..... | 2 | 622 | 67 55 | | | |
| E. P. Sure..... | | | | 569 | | 204 10 |
| Gilco..... | | | | 13 | 1,322 | 4,066 90 |
| Q. G. & Bunker Hill..... | | | | 7,350 | | 238,591 22 |
| Storm King..... | | | | 324 | | 15,903 95 |
| Clipper..... | | | | | | |
| North San Pedro..... | | | | | | |
| Stonewall..... | | | | | | |
| Other mines..... | | | | | | |
| Tailings..... | 720 | | 14,877 84 | | | |
| Totals..... | 6,615 | 1,957 | \$200,057 35 | 7,873 | 562 | \$284,609 00 |

| THIRD QUARTER. | | | FOURTH QUARTER. | | | TOTALS. | | |
|----------------|---------|--------------|-----------------|---------|--------------|---------|---------|--------------|
| Tons. | Pounds. | Gross Value. | Tons. | Pounds. | Gross Value. | Tons. | Pounds. | Gross Value. |
| | | | | | | 754 | | \$ 4,966 21 |
| | | | | | | 61 | | 2,501 00 |
| 5,000 | | \$38,052 62 | | | | 5,000 | | 38,052 62 |
| 245 | | 7,217 37 | 400 | | \$ 8,905 87 | 645 | | 16,123 24 |
| 3,317 | | 25,425 84 | 1,252 | | 6,781 13 | 4,569 | | 32,206 97 |
| 8,911 | | 33,567 00 | 10,247 | | 42,114 54 | 19,158 | | 75,681 54 |
| 645 | | 14,459 22 | 518 | | 12,876 81 | 1,163 | | 27,336 03 |
| | | | 3,500 | | 35,074 44 | 3,500 | | 35,074 44 |
| 336 | | 3,483 44 | 1,697 | | 13,854 88 | 2,033 | | 17,338 32 |
| | | | | | | 22,182 | 1,000 | 156,736 44 |
| 18,454 | | \$122,205 49 | 17,614 | | \$119,607 07 | 59,065 | 1,000 | \$406,016 81 |

COUNTY—1877.

| THIRD QUARTER. | | | FOURTH QUARTER. | | | TOTALS. | | |
|----------------|---------|--------------|-----------------|---------|--------------|---------|---------|--------------|
| Tons. | Pounds. | Gross Value. | Tons. | Pounds. | Gross Value. | Tons. | Pounds. | Gross Value. |
| | | | | | | 1,457 | | \$ 53 82 |
| | | | | | | 5 | 1,109 | 1,174 26 |
| 9 | 455 | \$ 1,839 00 | 367 | 1,570 | \$28,935 22 | 378 | 285 | 30,832 51 |
| | | | | | | 3 | 1,146 | 535 14 |
| 3 | 545 | 2,104 11 | | | | 7 | 1,523 | 3,184 14 |
| 180 | 600 | 23,009 87 | 83 | 400 | 9,291 74 | 536 | 1,671 | 62,544 44 |
| | | | | | | 77 | | 2,310 00 |
| | | | | | | 5 | 182 | 287 91 |
| | | | | | | 1 | 1,474 | 678 29 |
| | | | | | | | 529 | 52 98 |
| | | | | | | 1 | 200 | 349 81 |
| | | | 5,457 | | 105,147 61 | 11,163 | | 279,229 04 |
| | | | | | | 2 | 622 | 67 55 |
| | | | | | | | 569 | 204 10 |
| | | | | | | 13 | 1,322 | 4,066 90 |
| 4,029 | | 124,684 20 | | | | 11,379 | | 363,275 42 |
| 324 | 97 | 22,267 06 | 311 | 1,998 | 18,688 80 | 960 | 95 | 38,175 01 |
| 51 | | 1,701 76 | 55 | 1 | 2,417 12 | 106 | 1 | 4,118 88 |
| | | | 52 | | 3,016 00 | 52 | | 3,016 00 |
| | | | 78 | 1,630 | 4,991 35 | 78 | 1,630 | 4,991 35 |
| | | | 28 | 348 | 3,080 11 | 28 | 348 | 3,080 11 |
| 105 | | 1,793 03 | 272 | | 4,950 40 | 377 | | 6,743 43 |
| 4,701 | 1,697 | \$177,399 03 | 6,705 | 1,947 | \$180,518 35 | 25,897 | 163 | \$842,583 73 |

WAGES PAID.—The wages for mill employes range from \$2 to \$5 for twelve-hour shifts, and seem to be in proportion to the wages paid miners in the district where the works are situated. As a rule, mill employes receive about 10 per cent. more than miners, the difference in the length of their shifts (which for mill hands is almost invariably twelve hours) entitling them to more pay. In one or two districts mill hands were paid less than miners, however. Chinese are employed to some extent, and receive from \$1 to \$2. They work generally as laborers. Foremen are paid from \$4 to \$10 per day. The scale of wages paid in the Comstock mills is appended:

TABLE CI.—RATE OF WAGES OF DIFFERENT CLASSES OF EMPLOYÉS IN THE COMSTOCK MILLS.

| Class. | Wages per shift. |
|-----------------------|------------------|
| Agitator men..... | \$3 50 |
| Amalgamators..... | 4 00 |
| Blacksmiths..... | 5 00 |
| Blanket sweepers..... | 3 00 to 3 50 |
| Carpenters..... | 5 00 to 6 00 |
| Chargers..... | 3 50 to 4 00 |
| Driers..... | 4 00 |
| Engineers..... | 5 00 to 7 00 |
| Feeders..... | 3 00 to 4 00 |
| Firemen..... | 4 00 |
| Foremen..... | 5 00 to 6 00 |
| Laborers..... | 3 00 to 4 00 |
| Masons..... | 6 00 |
| Oilers..... | 3 50 to 4 00 |
| Panmen..... | 4 50 to 5 00 |
| Retorters..... | 3 50 to 4 00 |
| Refiners..... | 4 00 to 4 50 |
| Tankmen..... | 3 50 to 4 00 |
| Teamsters..... | 3 50 |
| Watchmen..... | 3 50 to 4 00 |
| Woodmen..... | 3 50 |

Illustrative tables are appended, showing the classification of the employes in the Comstock mills according to occupation and nationality. Of the 339 men whose nationality is recorded, 8 are classed with the staff and are omitted from the table of occupations.

TABLE CII.—NUMBER OF MEN OF DIFFERENT CLASSES EMPLOYED IN THE PRINCIPAL COMSTOCK MILLS, EXCLUSIVE OF STAFF: 1880.

| MILL. | Number of men employed. | Amalgamators. | Acid makers. | Battery feeders. | Blacksmiths. | Blanket sweepers. | Bluestone makers. | Bullion refiners. | Carpenters. | Cooks and waiters. | Engineers. | Firemen. | Foremen. | Laborers. | Lead burners. | Machinists. | Metal roasters. | Millwrights. | Oilers. | Retorters. | Tankmen. | Teamsters. | Watchmen. |
|------------------------------------|-------------------------|---------------|--------------|------------------|--------------|-------------------|-------------------|-------------------|-------------|--------------------|------------|----------|----------|-----------|---------------|-------------|-----------------|--------------|---------|------------|----------|------------|-----------|
| Total..... | 331 | 27 | 2 | 3 | 10 | 17 | 1 | 3 | 5 | 5 | 22 | 6 | 5 | 140 | 1 | 8 | 5 | 1 | 7 | 3 | 50 | 9 | 6 |
| Brunswick..... | 40 | 4 | | | 2 | 4 | | | 1 | | | | | 9 | | | | | 2 | 2 | 14 | 1 | 1 |
| California..... | 72 | 7 | | | 1 | 8 | | | 1 | | 4 | 3 | 3 | 33 | | 2 | | | 2 | | 6 | | 2 |
| Excelsior..... | 12 | | | | | | | | | 1 | 2 | | 1 | 8 | | | | | | | | | |
| Franklin..... | 15 | 2 | | | 2 | 2 | | | 1 | | | | | 8 | | | | | | | | | |
| Lyon..... | 46 | | 2 | | 1 | | 1 | | | 3 | | 3 | 1 | 23 | 1 | | 5 | | | | | 6 | |
| Mariposa..... | 18 | 3 | | | | | | | | | 3 | | | 7 | | 1 | | | | | 4 | | |
| Morgan..... | 33 | 2 | | | 2 | 1 | | | 1 | | 3 | | | 9 | | | | | 3 | 1 | 10 | 1 | |
| Omega..... | 12 | | | | | | | 3 | | | | | | 7 | | | | | | | | | 2 |
| Scorpion G. and S. M. Co. (b)..... | 26 | 4 | | 3 | | 2 | | | | 1 | 5 | | | 7 | | | 1 | | | | 2 | 1 | |
| Trench..... | 26 | 3 | | | 1 | | | | | | 3 | | | 4 | | | | | | | 14 | | 1 |
| Woodworth..... | 31 | 2 | | | 1 | | | | 1 | | 2 | | | 25 | | | | | | | | | |

^a In addition to the number of men here classified there were employed at other mills, which were either idle or running but a short time, 66 men, as watchmen, laborers, etc. The total amount paid as wages during the census year by the Comstock mills was \$372,767 19.

^b Includes Boston and Douglas mills.

AMALGAMATING MILLS.

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TABLE CIII.—NATIONALITY OF MEN EMPLOYED IN THE PRINCIPAL COMSTOCK MILLS, INCLUDING STAFF: 1880.

| Mill. | Number employed | Americans | Azores islands. | Belgians | Canadians | Channel islands. | Chinese | Danes | English | French | Germans | Irish | Italians | Newfoundland | Norwegians | Nova Scotians | Portuguese | Russians | Scotch | Slavonians | Swedes | Swiss | Welsh |
|-------------------------------|-----------------|-----------|-----------------|----------|-----------|------------------|---------|-------|---------|--------|---------|-------|----------|--------------|------------|---------------|------------|----------|--------|------------|--------|-------|-------|
| Total | 339 | 115 | 1 | 1 | 86 | 1 | 29 | 12 | 13 | 1 | 16 | 77 | 2 | 2 | 2 | 4 | 10 | 1 | 5 | 2 | 5 | 3 | 1 |
| Brunswick | 41 | 17 | | | 7 | | | 1 | 2 | | 2 | 10 | | | | | | | | 2 | | | |
| California | 72 | 20 | | 1 | 5 | | | | 2 | | 5 | 28 | 1 | | | 1 | 2 | 1 | 2 | | 2 | 2 | |
| Excelsior | 12 | 3 | | | 2 | | 1 | | | | 2 | 2 | | | | | 2 | | | | | | |
| Franklin | 16 | 7 | | | 1 | | | 3 | | 1 | 1 | 2 | | | | | | 1 | | | | | |
| Lyon | 48 | 17 | 1 | | 5 | 1 | 14 | | 3 | | 1 | 3 | | | 1 | | 2 | | | | | | |
| Mariposa | 18 | 6 | | | 3 | | | 2 | | | 2 | 4 | | | | 1 | | | | | | | |
| Morgan | 34 | 5 | | | 2 | | | 5 | 4 | | 3 | 8 | | | 1 | 1 | | | 2 | | 2 | 1 | |
| Omega | 13 | 3 | | | 5 | | | | | | | 4 | | | | | | | | | | | 1 |
| Scorpion G. and S. M. Co. (a) | 26 | 14 | | | | | 1 | | | | | 5 | | | | 1 | 4 | | | | 1 | | |
| Trench | 27 | 10 | | | 5 | | | | 1 | | | 9 | | 2 | | | | | | | | | |
| Woodworth | 32 | 13 | | | 1 | | 13 | 1 | 1 | | | 2 | 1 | | | | | | | | | | |

a Includes Boston and Douglas mills.

RELATION OF LABOR TO PRODUCT.—An analysis of the results reached in 160 mills shows that for every ton of ore crushed the labor of one man for 3.9 hours, costing \$1 34, is required. For the separate establishments the range is very great, depending upon the character of the ore and the treatment and upon the efficiency of the machinery, while wide variations are found in the averages for the different states and territories. The most economical process in point of labor, as in other details, is the treatment of free-milling gold ores by large wet-crushing mills; the most expensive, that of reducing base silver ores, which require chloridizing-roasting as a preliminary to pan amalgamation. Dakota, where the ores worked are exclusively of gold, and California and Oregon, where such ores largely predominate, are therefore the localities where the greatest saving in labor is effected; while Arizona, Nevada, and Montana show a much greater expenditure of labor, as would be expected, in view of the character of their ores. In Colorado and Idaho the different classes of mills are nearly balanced, and the labor employed in crushing a ton of ore closely approximates the average for the whole country. It should be observed that while in tonnage the gold mills take the lead, the silver mills treat ore of a higher grade, so that a comparison based upon the bullion product would show somewhat different results.

To produce a dollar in gold bullion costs 8 cents for mill labor in Dakota; in Nevada, though over five times as much work is required per ton treated, the cost for mill labor per dollar of silver bullion produced is 7 cents, or practically the same proportion. The following table shows the average number of hours' work and cost of labor per ton of ore crushed in the principal mining states and territories, and is based on the treatment of nearly a million and a half tons:

TABLE CIV.—AMOUNT AND COST OF LABOR IN AMALGAMATING MILLS.

| State or territory. | Number of mills | Tons treated. | Total number of men employed. | Foremen. | Amalgamators | Day laborers. | Other workmen. | Total number of hours' work done during the year. | Total sum paid on labor account, exclusive of staff. | Average number of hours per ton crushed. | Average amount paid for labor per ton crushed. |
|---------------------|-----------------|---------------|-------------------------------|----------|--------------|---------------|----------------|---|--|--|--|
| Total | 160 | 1,467,478.75 | 2,046 | 101 | 302 | 657 | 986 | 5,745,785 | \$1,973,900 00 | 3.915 | \$1.345 |
| Arizona | 11 | 15,946.40 | 137 | 3 | 23 | 64 | 47 | 200,340 | 71,717 00 | 12.563 | 4.497 |
| California | 33 | 419,883.50 | 301 | 13 | 76 | 147 | 65 | 1,078,742 | 201,577 60 | 2.569 | 0.694 |
| Colorado | 28 | 140,117.35 | 197 | 23 | 22 | 57 | 95 | 579,574 | 140,024 00 | 4.137 | 1.042 |
| Dakota | 22 | 506,238.00 | 259 | 13 | 35 | 147 | 64 | 825,001 | 251,759 00 | 1.629 | 0.497 |
| Idaho | 7 | 16,391.25 | 59 | 1 | 8 | 9 | 41 | 70,128 | 22,017 00 | 4.278 | 1.343 |
| Montana | 13 | 47,801.00 | 144 | 9 | 17 | 62 | 56 | 373,740 | 191,609 00 | 7.810 | 4.008 |
| Nevada | 33 | 237,004.75 | 742 | 34 | 98 | 147 | 465 | 2,063,813 | 730,140 00 | 8.686 | 3.111 |
| Oregon | 5 | 12,437.00 | 27 | 2 | 6 | 14 | 5 | 41,684 | 10,250 00 | 3.352 | 0.824 |
| Utah | 8 | 71,059.50 | 180 | 3 | 19 | 10 | 148 | 512,757 | 249,804 00 | 7.216 | 3.515 |